# REPORT RESUMES

ED 002 823 24

PARENTAL INFLUENCE UPON DECISIONS OF SCHOLASTICALLY TALENTED YOUTH CONCERNING HIGHER EDUCATION.

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WISCONSIN UNIV., MADISON
REPORT NUMBER CRP-247-SUPPLEMENT PUB DATE 58
EDRS PRICE MF-$0.36 HC-$8.60 215P.

DESCRIPTORS- *PARENT ATTITUDES, *PARENTAL BACKGROUND, *PARENT INFLUENCE, *HIGHER EDUCATION, *HIGH SCHOOL STUDENTS, COMPARATIVE ANALYSIS, MADISON, WISCONSIN

THE PRIMARY PURPOSE OF THIS INVESTIGATION WAS TO DETERMINE WHETHER THERE ARE IMPORTANT DIFFERENCES IN SELECTED PARENTAL BACKGROUND FACTORS BETWEEN SCHOLASTICALLY TALENTED HIGH SCHOOL GRADUATES WHO CONTINUE THEIR EDUCATION IN DEGREE-GRANTING INSTITUTIONS AND THOSE WHO DO NOT. THERE WERE TWO RELATED PROBLEMS--(1) TO DETERMINE THE AMOUNT OF STABILITY OF THE POST-HIGH SCHOOL PLANS OF THESE SCHOLASTICALLY TALENTED YOUTH, AND (2) TO REPORT ON THE SPECIFIC ACTIVITIES IN WHICH THEY WERE ENGAGED IN THE FALL OF 1957. DATA USED FOR THE STUDY WERE OBTAINED BY A STATEWIDE SURVEY OF 3,500 HIGH SCHOOL SENIORS CONCERNING PLANS BEYOND HIGH SCHOOL AND FAMILY BACKGROUND. A SPECIAL ANALYSIS OF 5,500 SENIORS WAS USED AS A LATER SAMPLING. A SURVEY OF THEIR PARENTS DETERMINED WHAT THEY WERE DOING AND FURNISHED ADDITIONAL FAMILY BACKGROUND INFORMATION. THE CONCLUSIONS AFTER ANALYSIS OF DATA WERE THAT THE EDUCATION LEVEL ATTAINED BY PARENTS, OCCUPATION OF FATHER, ECONOMIC STATUS, FINANCIAL HELP FROM PARENTS, AND PARENTAL ENCOURAGEMENT WERE SIMILAR IN BOTH THE STUDENTS WHO WENT ON TO HIGHER EDUCATION AND THOSE WHO DID NOT. THERE WAS A HIGH DEGREE OF STABILITY BETWEEN THE VARIOUS PLANS OF THE GROUP EXPRESSED IN THE SPRING AND THE REALIZATION OF THE PLANS. (GC)

ED002823

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# PARENTAL INFLUENCE UPON DECISIONS OF SCHOLASTICALLY TALENTED YOUTH CONCERNING HIGHER EDUCATION

Donald Delos Young

(Under the supervision of Professor Alanson H. Edgerton)

The primary purpose of this study was to determine whether there are important differences in selected parental background factors between scholastically talented high school graduates who continue their education in degree granting institutions and those who do not. The term "scholastically talented" refers to high school graduates who rank between the 75-99 percentiles both in their final class standing and on the Henmon-Nelson Test of Mental Ability.

Two related problems were: to determine the amount of stability of the post-high school plans of a group of scholastically talented graduates and to report on the specific activities in which they were engaged in the fall of 1957.

These data were obtained from a state-wide survey made in the spring of 1957 of approximately 35,000 Wisconsin high school seniors who answered questionnaires concerning their post-high school plans and family background. Using a sample of about 5,500 of these seniors, a survey of their parents in the fall determined what they were then doing and furnished additional family background data. From this sample, 772 or ninety-seven per cent of those who qualified as scholastically talented were selected for this study. There were 312 boys and 460 girls.

Using the chi square technique, differences between the college-going and non-college subjects were determined concerning the influence of the following parental background factors on their post-high school educational decisions:

1. highest level of education attained by the parents
2. occupation of the father
3. economic status of the family
4. parental encouragement to attend college
5. parental influence on post-high school plans as evaluated by the children
6. parental opinions on the value of a college education

It was found that significantly more parents of college-going than non-college subjects:

1. graduated from college
2. held professional, executive, managerial, and official positions (fathers)
3. were economically above average
4. encouraged their children to attend college
5. considered college worth the financial sacrifice, socially advantageous, and a guarantee of a more satisfying life

It was also found that significantly more parents of non-college subjects than of college subjects:

1. did not attend high school
2. were engaged in agriculture and factory work (fathers)
3. could not help finance their children's college education
4. did not encourage their children to attend college

There were no differences between the college-going and non-college subjects concerning the amount of influence they stated their parents had on their post-high school plans.

A high degree of stability was noted between the college plans and work plans of these subjects and their realization. There was also a high degree of stability in the boys' military plans and the girls' non-degree school plans.

In the fall the majority of the subjects entered degree granting institutions. Proportionately more boys than girls enrolled, and over half of both sexes chose publicly supported schools in Wisconsin. Many more girls than boys entered non-degree schools or sought employment.

This study pointed out the extent to which certain parental background factors help influence the post-high school educational decisions of scholastically talented youth. Furthermore, it showed that there is a high degree of stability in the college-going plans of both male and female high-ranking graduates. These findings should prove helpful to those charged with the responsibilities of guiding scholastically talented youth and planning programs of higher education for them.

# PARENTAL INFLUENCE UPON DECISIONS OF SCHOLASTICALLY TALENTED YOUTH CONCERNING HIGHER EDUCATION

BY

DONALD DELOS YOUNG

A thesis submitted in partial fulfillment of the
requirements for the degree of

DOCTOR OF PHILOSOPHY

(Education)

at the

UNIVERSITY OF WISCONSIN

1958

# ACKNOWLEDGEMENTS

The author wishes to express his appreciation to the many individuals who assisted in this study.

Grateful appreciation is extended to his major professor, Dr. A. H. Edgerton, for his guidance and sincere interest shown throughout the author's graduate training and the preparation of this dissertation. Further appreciation is expressed to Dr. Clifford S. Liddle, Dr. Arvil S. Barr, and Dr. L. Joseph Lins for their willing assistance.

Most sincere thanks are also extended to Dr. J. Kenneth Little, director of the research project of which this study is a part, for his scholarly interest and able supervision. The research reported in this dissertation was related to and performed in connection with a contract with the United States Office of Education, Department of Health, Education, and Welfare.

Not to be forgotten are the many 1957 Wisconsin high school graduates and their parents who completed the questionnaires essential to this investigation.

Finally, sincere gratitude to his wife, Patricia, whose inspiration and assistance helped make this study a reality.

D.D.Y.

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# CHAPTER I

## NATURE AND IMPORTANCE OF THE PROBLEM

The constantly increasing role that the United States is assuming in world leadership and technology has brought about a national stress on the education of present and future generations. Society, as expressed through public opinion, looks to its high ability youth as those most capable of benefiting from this training. The task of identifying and guiding these future leaders has been delegated to our schools. It is mainly through our system of higher education that these talented youth will be prepared for their future roles.

Since in our free society participation in education beyond high school is voluntary, it becomes imperative to identify the factors which determine college attendance. An important factor to be considered is the influence of parents and the family background on the post-secondary school education plans of their children.

Although it is generally known that parents and cultural background tend to influence the educational decisions of youth, the exact nature of this complex and many-sided relationship has not yet been determined. This investigation will attempt to describe and evaluate some of these influences.

## Statement of the Problem

The major problem of this study is to determine if high mental ability and scholastically talented youth who choose to continue their education beyond high school in degree granting institutions differ markedly in certain selected parental background factors from those who do not.

The subjects of this study were seniors in Wisconsin high schools who in the spring of 1957 completed a questionnaire relating to their plans beyond high school and their family background. That fall a sample of the parents of these graduates were asked to report on what their children were doing. They were also requested to furnish additional family background data and to indicate their opinions concerning the value of a college education.

### Answers Sought

Answers to the following six questions will be sought regarding parental background factors and their influence, if any, upon the post-secondary school educational decisions of scholastically talented youth:

1. What was the highest level of education attained by each parent?
2. What is the father's occupation?

3. What is the economic status of the family?
4. Did the parents encourage their children to seek a college education?
5. What is the children's evaluation of the amount of influence their parents had on their post-high school plans?
6. What are the parents' opinions concerning the value of a college education? How do these opinions compare with those of their children?

In addition, answers will be sought to these two related questions:

1. What is the degree of stability of the post-high school plans of these scholastically talented youth?
2. What were the specific activities engaged in by these scholastically talented subjects in the fall of 1957?

## Definition of Terms

In order to understand fully the nature of this study, it is important to know exactly what is meant by the terminology used. Thus, the following terms which are essential to the study are defined.

Scholastically talented characterizes a person whose class rank was in the 75-99 percentile range upon graduation from high school and who also ranked between the 75-99 percentiles on the Henmon-Nelson Test of Mental Ability.

Degree granting institution refers to a school giving instruction in advanced courses generally preparatory to professional life, having a course of study either fixed or partly fixed and partly elective, commonly requiring four years for completion, and having the right to confer the baccalaureate degree.

Economic status pertains to the relative financial position of the family within the community as evaluated by both the student and the parents.

Level of education means the point reached in a system of formal training and instruction aimed at developing the normal powers of the intellect and/or skills.

Parental background factors refer to those elements of a parent's life and environment which influence his children.

Parental influence is considered as the extent to which a parent affects, modifies, or acts upon the motivations of his child so as to change his thinking and/or behavior.

Parental encouragement indicates the extent to which a parent stimulates or inspires his child to do something.

Parental opinion is a conclusion or judgment held by a parent with respect to the value of something.

## A Need for Further Study

Previous research has not fully explored the influence of parents on the decisions of gifted youth about education beyond high school.

As far back as the 1920's Terman, Burks, and Jensen in their studies of geniuses pointed out that inadequate financial resources and other "family exigencies" account for a termination of formal education of many superior youth (86:37). Similar conclusions were drawn by Goetsch in the late 1930's in a study of high ability youth in Milwaukee (27:34-35, 52).

Berdie illustrated clearly the importance of parental and home influence upon the educational plans of scholastically talented youth in his Minnesota study of the early 1950's. He writes that information available "indicates that several factors other than financial resources are related to college attendance." Cited as particularly important were the home background, father's occupation, parental attitudes regarding higher education, and education of the parents (9:352).

Hollinshead in his recent appraisal of who should go to college concluded that there are numerous factors emanating from a young person's socio-cultural background which motivate him to attend or not to attend college after high school graduation (42:42, 74).

Because the research that has been done regarding parental influence on the college decisions of gifted youth has been of a general nature and thus failed to analyze the relationship conclusively, there is a need for further investigation of the problem.

## Basic Assumptions

A study such as this one must first take into account certain fundamental assumptions before proceeding with the major tasks of the investigation. Three basic assumptions underlie the entire study. Perhaps the most pertinent is that parents themselves and certain parental background factors tend to influence in some manner the decisions of high ability youth to attend or not to attend college after graduating from high school.

Another assumption is that youths who rank in the top quartile of their high school graduating class in both class rank and on the Henmon-Nelson Test of Mental Ability are considered scholastically talented.

A study of this nature is in part dependent upon the voluntary and uninhibited responses of the subjects. It is almost impossible to verify this type of information. Thus, it is assumed that an individual's beliefs and feelings were honestly expressed in his responses to the statements on the questionnaires.

## Importance of the Study

The present study should be a significant contribution to the relatively limited research since 1950 in the vitally important area of parental influence upon the post-secondary school decisions of scholastically talented youth.

The data collected and the interpretations made should have special significance for those having the responsibility of planning sound educational programs for superior youth in Wisconsin and elsewhere.

Specifically, the findings should be useful in:

1. the counseling of both parents and scholastically talented youth at both the secondary school and the college levels.
2. formulating policies for college admissions and granting scholarships for scholastically talented youth.
3. assisting school personnel who have a role in the education of academically talented youth.
4. planning state-wide programs of higher education.

The succeeding chapter presents a historical review of the literature related to this study. Research from the early 1920's until the present is reviewed to set the background for the present investigation.

# CHAPTER II

# REVIEW OF LITERATURE RELATED TO STUDY

History is frequently found a helpful tool for interpreting present situations in light of past happenings. Accordingly, before investigating the relationship of parental background factors to the post-secondary school decisions of scholastically talented youth, it was thought necessary to review the related research available.

In order to fully understand the significance of this relationship, it was deemed advisable first to investigate the broad area of parental background factors and their particular relationship to the post-high school decisions of all youth. It was then necessary to examine the research that had already been done concerning the influence these factors have on high school graduates of superior ability and performance. Thus, this review is not limited to a narrow search for parental background factors and their relationship to the after-high school plans of academically talented youth, but is of a much wider scope. This broad background approach is necessary in order to understand fully and interpret realistically the problem under consideration.

Since there was little pertinent research concerning parental background factors and their relationship to the post-secondary school plans of youth conducted prior to 1920, the present investigation is naturally confined to the period from that date to the present time.

Beginning with the early 1920's there is a substantial amount of literature available. Although most of these studies are of a general nature, there are a few related to particular parental background factors, such as economic and social. Several investigations undertaken during the period from the late 1930's until the early 1950's deal specifically with high mental ability youth and their post-high school plans.

In the following review the research is divided into two broad classifications: (1) studies of the relationship of parental background factors to the post-secondary school plans of youth with no specific emphasis on the scholastically talented, and (2) studies of parental factors related to scholastically talented youth.

## Relation of Parental Factors to Youth in General

What are the roles played by parents and the myriad of parental background factors in the college-going phenomena?

Byron S. Hollinshead, in his penetrating analysis of who should go to college, stated that "any analysis of the reasons for deciding whether to attend college . . . is almost sure to be inadequate." There is a variety of reasons why youth do not go, some tangible and some intangible. Certainly such decisions depend partly on such tangible factors as academic ability, scholastic attainment, family income, sex, race, geography, religion, availability of college facilities, and failure to complete high school. However, Hollinshead continued:

> . . . attendance also depends upon a number of intangible factors, which may be equally influential but which cannot be described in statistical terms.

Many youth are not interested, some because they are girls and thus are not expected to attend, others because of society's demands upon them at a given time, and still others because of the competition of other educational opportunities. Also prominent are factors such as the motivation of the individual, influences colleges bring to bear, the type of high school attended, the tradition of college-going within the family, and the area of the country in which one lives (42:42, 74).

There is considerable evidence to show that a relationship exists between college attendance and the economic status of the family. As early as 1924 Colvin and MacPhail found that approximately thirty-one per cent of the graduating seniors in the high schools of Massachusetts were not planning to continue their formal education because of lack of funds (17:9). About a decade later the Wisconsin Education Association, in a two year review of Wisconsin schools, reported:

> For the most part enrollments in schools below college grade are not dependent on the economic status of the family or individual whereas college attendance has a direct bearing on active business conditions and permissive family income.

Thus, business conditions often dictate college enrollments because the desire to attend college is suppressed by inadequate financial resources (98:32).

Likewise, Howard M. Bell, in his study of the conditions and attitudes of youth in Maryland during the depression years of the 1930's, noted that almost fifty per cent of youth did not proceed on to college because of insufficient funds (6:66). Homer P. Rainey conducted an extensive survey of youth in Pennsylvania during the late 1930's and discovered that for every youth who entered college there was another just as fully qualified academically who was denied the opportunity because of economic conditions (71:145).

The same conclusion was reached by Bernard D. Karpinos in his nation-wide survey of youth during the early 1940's. He found a direct relationship between college attendance and family income and that attendance increases "markedly" with increased family income. A similar pattern was evidenced by both male and female youth (47:43, 45). From their studies of social class status Warner, Havighurst, and Loeb suggested that children at the lower economic levels are denied advanced educational opportunities because of inadequate finances (95:53).

Floyd W. Reeves (72), reporting on the published statements of four research agencies (10, 66, 74, 76, 83) in early 1950, listed ten barriers to higher education. Several of these studies suggest a close relationship between family income and college attendance. The Report of the President's Commission on Higher Education stated that "low family income . . . constitutes an almost impassible barrier to college education" for many youth (74:28). The American Council on Education likewise concluded that financial circumstances often present an exceedingly powerful barrier to higher education for youth (76).

Evidence of the relationship of college-going and family income has also been obtained for the period after 1950. Hollinshead presented data making it clear that ". . . the probability of attending college is greatly increased by the amount of family income." Youth from high income or professional class families are more likely to attend college than those from low income or working-class families. Although it is difficult to estimate the influence of cost on college attendance, it is known to be "considerable." Whenever education costs are reduced, more youth can attend college (42:30-32, 54-55).

The occupational status of parents has been studied in an attempt to determine the relationship between it and college attendance. From 1919 to 1921 George S. Counts investigated the selective nature of American secondary education by using data obtained in six cities from various sections of the United States. Parental occupations were divided into seventeen categories to help measure family economic status. A close relationship was found to exist between parental occupations and youth's expectations to continue formal education after high school graduation (19).

Several years later three similar studies were made. From 1927 to 1930 Herman M. Wessel surveyed the public schools of Cheltenham, Pennsylvania (96). In 1931 and 1932 Floyd Jordan studied the student populations of twenty-one high schools in eleven southern cities (45). During the same period, Kefauver, Noll, and Elwood conducted a national survey which included data obtained from thirty-four high schools in thirteen cities throughout the country (49). The studies used Counts' parental occupational classification to determine family economic status. All three concluded that a definite relationship existed between parental occupations and the expectations of youth to further their education beyond high school.

Another such study was made by Edward F. Potthoff in 1924 at the University of Chicago in which he found that the freshmen students were "markedly selective in character" as to the father's occupation. Chances to attend the university "varied significantly" with the level of the father's occupation. Elaborating further, he said:

> These chances were by far the greatest among the proprietary or wealthiest class, and among the professional or best-educated class; they were higher among the non-labor than among the labor groups, and higher among the skilled than among the semi-skilled tradesmen; and they were by far the lowest among the occupational groups which require the least skill and bring the smallest financial returns (70:295-296).

Herbert A. Toops directed a large-scale study at Ohio State University in the mid-1930's in an attempt to understand the basic forces that determine college attendance. Records of 32,058 seniors enrolled in Ohio high schools were studied. A two year follow-up of these graduates revealed some of the "forces" that motivated them either to go to college or do something else. Toops found that the father's occupation and the education of the parents are extremely important factors in predicting whether a child will go to college. In summarizing his data, Toops stated that the amount of money available is not as important a consideration as the attitudes toward college of both the child and his parents (87:259-261).

Findings of contemporary researchers have substantiated the conclusions of pioneers in the field. The Report of the President's Commission on Higher Education reported in 1948 that ". . . the father's occupation has been found . . . a determining factor in a young person's college expectancy" (74:28). The New York Study of 1948 (10, 66) and the American Council on Education study of 1949 (76) both suggested the relationship between occupational status of the parents and college attendance. Reeves in his 1950 report on barriers to higher education gave tacit agreement to this relationship (72).

There has been comparatively little research done on the relation of social class factors to college attendance. One such study conducted by James S. Davie in 1949 in New Haven, Connecticut, involved 3,736 children and their parents. Families of the ". . . study group were statified socially according to the ecological area of residence." From his findings Davie reported that the social positions occupied by the children's parents were important determiners of how much schooling the children received and whether or not they would continue on to college. Members of the lower social classes encounter the greatest obstacles to their children's continued education.

> On the post-secondary level one notes that the higher one goes in the class structure the greater is the percentage of children one finds attending some type of post-secondary schooling. Thus social class membership aids in determining both how long one remains in school and the type of post-high school education one desires.

An interesting observation was made by Davie in commenting on what the various social classes considered to be the benefits of education. All social class levels thought education was a means to better one's future economic welfare, but the upper strata also emphasized the "psychic" benefits of education (22:175-185).

Very little research was conducted prior to 1950 concerning the amount of parental encouragement or motivation for youth to continue schooling after completing high school. One of the first studies was undertaken by Katz and Allport at Syracuse University in the early 1930's. In their study of student's attitudes, they attempted to discover why students came to college. Using a check list of ten items and having approximately 3,500 students react to it, they found that one of the reasons checked with the greatest frequency was "because my parents wished it." Although the students assigned parental encouragement as one of the main reasons for enrolling in college, Katz and Allport questioned whether the students had evaluated with "full insight" the extent to which their parents had motivated them. They suggested that

> . . . the influence of elders, and the matter-of-fact assurance of parents . . . have probably contributed far more to the ultimate matriculation of the student than he would be prepared to admit (48:9-11).

The Report of the President's Commission on Higher Education pointed out quite clearly that the amount of encouragement or stimulation that a child receives from his parents ranks high as a determining factor in youth's attitude toward college attendance (74:28).

However, Robert J. Havighurst in commenting on the social implications of the Commission's report bemoans the fact that it failed to place enough emphasis on motivation and its relation to college attendance. Although he does not know how motivation for college is distributed in our population, he suggests that ". . . different social groups have different degrees of motivation for higher education." Havighurst and his colleagues conducted studies on various socio-economic classes in several midwestern cities and advanced this plausible thesis:

> On the basis of these studies it can be said that the motivational barrier is at least as important as the economic barrier in keeping these young people out of college.

Therefore, if the President's Commission expects to attain its goals, the problem of motivation for higher education must be overcome. Two suggestions made by Havighurst are:

1. Convince people in the lower social levels that "general education" in college is to be considered more valuable than immediate dollars earned.
2. Encourage more and better guidance programs in secondary schools so as to identify and encourage at an early grade level talented youth to continue their formal education into college (39: 259-260).

Probably one of the most all-inclusive research studies on high school seniors and their post-high school plans was that undertaken by Ralph F. Berdie in the early 1950's in Minnesota. Berdie sought to identify senior students' plans for the succeeding year and to determine what background factors were related to those plans. Approximately 24,892 or ninety-five per cent of Minnesota's graduating high school seniors responded to a questionnaire on plans after high school. A random sample of 2,700 graduates were sent follow-up questionnaires to determine if they had carried through with their expressed intentions (8).

Berdie attached great importance to the influence of the family in having children attend college. He said:

> A student's financial resources are related closely to his home background, and other family background factors have been found to be related to college attendance, including occupation of the father, attitudes of parents toward education, and education of parents.

Continuing, he suggested that if only one thing could be done to make certain that an able student enrolled in college, it ". . . would be to have him born into the proper home." Other "correlates" such as general aptitude, where a student lives in the country and within a state, sex, and high school grades were also noted (9:352-353, 356).

Ben Willerman was assigned the task of delving deeper into the role of parental attitudes toward college in the Minnesota study. A team of experienced interviewers sought information from fifty-seven randomly selected parents concerning their attitudes toward their children's post-high school plans. Attitudes of parents of college-planning youth were compared with those of work-planning youth to ascertain the association between parental attitudes and college attendance.

Specific attitudes and values of the parents varied greatly between the two groups. Most parents considered college important and cited as specific reasons "economic benefit, personal development, and general education." The parents of the college-going children, however, placed greater stress on the non-economic advantages of college. Additional evidence showing the importance attached to college was found in the fact that all of the parents of the college-planning children approved of their plans, but one-third of the parents of work-planning children disapproved of their plans and expressed opinions to the effect that they wished their children would attend college. In summarizing his findings, Willerman stated:

> We may imagine that within the homes of college-planning students, to a greater extent than for those not planning to attend college, there is a climate of positive valuations of college education and of the expectations that the children will attend college (8:173-177).

Hollinshead has much to say on the subjects of motivation and parental attitudes toward college. Two of his views are pertinent here. First, "one of the crucial factors in determining college attendance is family attitude." He believes that if a family has a college-going tradition and respect for education, then the children will more than likely attend college. Second, he states that a "lack of desire" for a college education is probably the greatest barrier to college attendance. Much emphasis is placed on motivation when he singles it out as being the one factor having more to do with college attendance than any other. Motivation, he continues, stems directly from the home, family, and cultural materials in the home environment

(42:35-37, 42-43, 64).

Joseph A. Kahl studied the educational aspirations of "common man" boys at Harvard University's Laboratory of Social Relations. His study concerning the ambitions of twenty-four boys from working class families of similar intelligence and background aimed to account for differences in motivation to attend college. Twelve of the boys were enrolled in the college preparatory course and definitely planned to attend college, while the other half were not following the pre-college curriculum nor were they planning on higher education.

Kahl raised the question of what influences the goals of lower-middle class boys. An analysis of the data showed that "parental pressure" influencing youth to attend college was present within certain social classes and not in others. Parents who wanted to "get ahead" encouraged their children at an early age to attend college. They emphasized scholastic achievement and discussed occupational goals with their children. Parents who were content with their life and wanted to "just get by" did not encourage their children to seek higher education. Likewise, youth who were "college orientated" by their parents had different attitudes and viewed high school with "a markedly different outlook" from their counterparts who were not so orientated. Thus, parents who were reluctant to accept the "status quo" encouraged their children to climb the educational ladder into the middle class and success. Kahl concluded:

> Only sons who internalized such values were sufficiently motivated to overcome the obstacles which faced the common man boys in school; only they saw a reason for good school performance and college aspiration (46:186-203).

## Relation of Parental Factors to Scholastically Talented Youth

What parental background factors influence scholastically talented youth to continue their education in degree granting institutions after graduation from high school?

Investigations have been made of the economic status of the family and college attendance by superior youth. One of the first studies was conducted by Viola E. Benson, in the early 1920's in Minnesota, in which she attempted to determine the relationship between the intelligence of a group of sixth-grade pupils and the subsequent grade level each attained. In Minneapolis she followed up 1,989 grade six pupils who had been administered an intelligence test. Although not indicating how she arrived at her conclusions, Benson suggested that many of the superior youth were interested in higher education, ". . . but were unable because of economic stress to attend college." She speculated that

> . . . the waste resulting from able high school graduates not going to college may be greater than is the waste resulting from those without ability attempting to do college work (7:163-167).

Terman, Burks, and Jensen in their studies of genius during the 1920's pointed out that the reasons most often given for not continuing full-time schooling after graduation from high school were economic. They found that "financial reasons often complicated by family exigencies account most frequently for termination of formal schooling" (86:83).

Edward A. Ross, an eminent sociologist, was much concerned about superior youth and equal educational opportunities during the 1920's. From his studies he concluded that many young people with excellent mental endowment drop out of school and cannot continue beyond the secondary school for financial reasons. He continued:

> . . . but this ought not to be so. The power of the bright sons of the poor to compete for the prizes of life with the sons of the well-to-do is limited by the financial inability of their parents to keep them long in school . . . . (77:358)

A study of parental income and college opportunities was conducted by Helen B. Goetsch in Milwaukee during the latter part of the depression of the 1930's. She studied 1,023 high school graduates of twelve Milwaukee public schools during 1937 and 1938. Two criteria were used in selecting the subjects for her investigation. One was the Henmon-Nelson Test of Mental Ability from which the investigator selected those seniors who had scores equal to the state percentiles of 86 to 100, or intelligence quotients of 117 and above. She assumed that these students were capable of doing successful college work. The other criterion was that of Wisconsin state income tax returns for 1936 which revealed the income of the parents. In the spring of 1938 a follow-up questionnaire was sent to the selected graduates requesting them to check reasons for not being in school at that time (27:14-21).

Goetsch asked herself the following questions: Why is it that so many superior youths discontinue their education after graduating from high school? Why do so many potential leaders fail to continue their education in college? Although she discovered a wide variety of reasons, the most frequently cited was an economic one. She said that if any ". . . reliance can be placed upon the accuracy of the reasons cited, 'lack of finances' accounts for more elimination than any other cause." In addition, approximately ninety-eight per cent of the subjects checked reasons such as "lack of funds, my family needs my earnings," and "I must work at home." These statements far outshadowed all other items in frequency. Thus, she concluded, if these three reasons can be considered economic, ". . . then four out of five of all reasons specified by these young people are economic." Also noted was the fact that ". . . boys are more apt to leave school because of financial handicaps than girls" (27:33-36).

Leo T. Phearman conducted a study in Iowa in the mid-1940's in which comparisons were made of scholastically talented high school graduates who enrolled in college with similarily gifted graduates not enrolled to determine whether factors other than talent influenced attendance.

A sample of 2,616 pupils from ninety-four public high schools that participated in the Iowa State Testing Program of 1946 and were distributed according to size and geographic area was drawn for the investigation. Results showed that

> . . . from the highest quarter to the lowest quarter there is a steady, though small, decrease in the percentage of youth checking the reason, "My parents could not afford to send me to college."

Thus, it was concluded that about one out of three of the out-of-college youth that could have profited from college were denied the opportunity because of family economic circumstances. The assumption was also made that with less talented graduates factors other than economic status of the family would be of more important consideration (67: 405-414).

Raymond A. Mulligan studied socio-economic background and college enrollment at Indiana University in 1947 using the occupation of the student's father as an index of socio-economic status. A twenty per cent sample of talented male students in attendance during the 1946-1947 school year was used for the analysis. On the basis of his findings, Mulligan

> . . . tentatively hypothesized that, in general, the absence of talented students from the white collar and skilled groups in institutions of higher learning is due, on the whole, to economic factors rather than to cultural factors, but that, in general, the absence of talented students from farming, semi-skilled, and unskilled groups in institutions of higher learning is due, on the whole to cultural factors rather than to purely economic factors (62:188-196).

Early in 1949 Leroy E. Barber canvassed the 1948 graduates of the three high schools in Erie, Pennsylvania, in an attempt to determine why some able high school graduates do not attend college. Graduates who had intelligence quotients of 115 or higher and who were assumed to have the ability to do successful college work but who did not enroll in college were selected for study. About a year after their graduation from high school, Barber interviewed these 111 graduates to discover why they did not elect to continue their formal education. All that the subjects and their parents said, considerations of their physical environment, and their school record were taken into account in drawing conclusions. The findings revealed that the economic factor, "Lack of finances," was the reason stated with the greatest frequency. However, if

> . . . one groups together as "motivational" the reasons listed as "Lack of academic interests," "Lack of serious purpose," and the several designated a "Preference for . . . ," he finds them applying to fifty-six per cent of the cases as "chief reasons," in comparison with the thirty-four per cent for whom "Lack of finances" was assigned as "chief reason" (5:93-96).

Although he found these factors to be understandable, Barber stated explicitly that society "cannot accept this unhindered operation." Continuing, he explained that our nation's human resources must be more effectively developed and utilized. Identification of our most gifted youth and "training them according to their talents is an obligation which rests squarely on school and family." Several practical suggestions based on the findings of this research were made:

1. Early diagnosis to discover pupils of college ability.
2. Motivational counseling.
3. Early contact with parents and pupils.
4. Adoption of the plan for college scholarship aid from the federal government (5:96).

In August of 1954 the National Science Foundation in its search for scientific talent contracted with the College Entrance Examination Board to engage in a study to determine causes for the loss of high level ability pupils from high school to college. In conducting their survey a questionnaire was administered together with a general aptitude test to a five per cent sample of public high school seniors throughout the United States.

Summarizing their findings, the Foundation reported that there were approximately 50,000 to 100,000 high school graduates possessing a high degree of general aptitude and interest for college who failed to continue their schooling for monetary reasons. Furthermore, there was another group of graduates of about equal number and ability who lacked ". . . the interest or drive or motivation for college as well as, in some cases, the means to go." It was therefore concluded that although insufficient finances are the primary reason for failure to enroll in college, certain community and parental deterrents cause a lack of interest or motivation in a majority of the superior high school graduates who do not enter college (16:conclusions 1-2).

Richard L. Plant, in his plan for talent searching, pointed out that a sparsity of good books and magazines, a lack of good stimulating conversation, and parents who do not encourage their children to attend college create an unfavorable attitude in youth toward higher education. Schools, he added, do not identify high ability pupils early enough nor do they have adequate guidance programs to help youth plan for the future at an early grade level. He concluded by stating that this inevitably leads to poor judgments by young people about their future careers (66).

Hollinshead, in his recent treatise of who should go to college, suggested that the financial and motivational are "curiously" mixed, hence it is difficult to say where one begins and the other ends. Both, however, are vitally important. He added that very often the financial problem is not solely an individual matter but a larger one that affects the entire family. Frequently the family depends on the earning power of the person desiring to go to college. Under these conditions

> . . . college attendance may be looked upon as a flight from family obligations, as destructive of family solidarity, as "leaving the family in the lurch."

On the other hand, the lack of funds excuse ". . . is probably a convenient ruse for those not otherwise highly motivated to attend college."

Hollinshead estimated that of the top quarter of youth about forty per cent are not adequately motivated to continue their schooling beyond high school, twenty per cent would probably go if they had the money, and the remaining forty per cent go under present conditions (42:74-75).

Stating that motivation presents a highly challenging view, Hollinshead gave greater emphasis to it than to economic factors in determining why many bright youth do not attend college. He cited "individual motivation" whereby the individual will "surmount" all barriers to attend college if he really has the desire and interest. He also referred to "social motivation" wherein a family "expects" a child to attend college and more than likely the child does. Family attitudes toward higher education differ widely from one social group to the next. Generally children from urban business and professional families are most likely to attend college while those from urban working-classes and those whose parents had less than a high school education are least likely to enroll in college (42:139,141).

Two major recommendations were made by Hollinshead whereby we can hope to increase the proportion of talented youth who go to college. First, provide scholarship assistance for youth sufficiently motivated to go, but who cannot because of inadequate financial resources. Second, inaugurate procedures such as the following to increase the educational motivation of the non-motivated group:

1. Improved selection and guidance procedures
2. A community scholarship association
3. Motivating procedures on the college campus
4. The local or community college (42:163-164).

Dael Wolfle, in his recent appraisal of America's resources of specialized talent, pointed out that money is an essential factor to be considered when attempting to determine who goes to college. He also emphasized the role of personal motivation by saying that it is probably the most essential item for which there is no substitute. Unless a young person really wants to attend college, there is probably nothing in the world short of force that will ever get him there.

However, the question was posed as to why some talented youth are favorably inclined toward college attendance and others not. Many contributing factors are related to each individual case. Of prime importance are the attitudes of parents and others in the young person's immediate environment. Wolfle added that if we hope to be successful in having all scholastically talented youth want to attend college, ". . . the attitudes toward higher education of many families and groups would have to be changed." As a first step in this direction he recommended "skillfully handled counseling" to "overcome parental disinterest" so that parents would encourage their children to attend college (99:141, 156-158, 250-251).

## Summary

A review of the literature since about 1920 revealed that considerable research had been done concerning the relationship between parental background factors and the post-secondary school plans of youth in general. However, notably lacking were studies regarding the influence these factors have on the decisions of the scholastically talented. Since this relationship has not been fully explored, it represents an important area for future investigation.

Considerable evidence showed that for youth in general a relationship existed between college attendance and the economic status of the family, father's occupation, and parental encouragement for higher education. For the most part, the studies revealed that one's chances to attend college varied significantly with these factors. In addition, several studies pointed out that, in general, the more education the parents had, the better the home and family background, the higher one advanced in the social structure, the greater were one's chances of attending college.

Studies depicting the relationship between parental background factors and the post-secondary school plans of scholastically talented youth concerned mainly the economic status of the family, socio-cultural background, attitudes of parents, and motivation of youth. As with the general studies, these factors were found to have considerable influence. Thus, higher income, better family and home, favorable attitudes created by the parents toward higher education, and the interest of the student himself greatly enhanced the chances for college attendance.

Recommendations were made by the researchers in an attempt to make certain that more scholastically talented youth entered college. Generally, they involved improved guidance programs, early diagnosis to discover superior ability, motivational counseling at all grade levels, early contact with parents and pupils, scholarship plans at the federal, state, and local level, and the establishment of local and community colleges.

Because the relationship between parental background factors and the higher educational plans of scholastically talented youth has not been adequately and recently investigated, the present research was undertaken. Specifically, the factors to be considered are education of parents, father's occupation, economic status of the family, parents' encouragement for youth to attend college, and their opinions concerning the values of higher education. The aim is to determine the extent of influence these factors have on the post-secondary school educational decisions of gifted youth. Due to the nation-wide concern with the training of present and future generations to meet our constantly increasing role in leadership and technology, this research has special significance.

The next chapter describes the background for the present investigation. The broad purposes, organization, and significance of the project of which this research is one facet are set forth.

# CHAPTER III

# BACKGROUND OF THE STUDY

The task of educating our country's future leaders to best meet the ever increasing demands of our national life and our role in world affairs has been delegated to our schools. A high school diploma is no longer adequate to cope with the complexities of modern living; more and more a college education is considered essential to meet the challenges of our present society.

The identification and guiding of those who can profit most from higher education has encouraged numerous investigations. Previous studies by Berdie (8), Cole (16), Hollinshead (42), Roper (75, 76), and Wolfle (99), to mention just a few, have helped to point the way by identifying some of the factors influencing youth about education beyond high school. These investigations have also indicated a need for further research in this complex problem. One such study is currently underway in Wisconsin.

In the spring of 1957, a state-wide inquiry into the post-high school plans of Wisconsin high school graduates was initiated. This project was one of a series of studies developed by the Coordinating Committee for Higher Education in Wisconsin, an agency appointed by the State Legislature to study and make recommendations concerning the state's needs for educational programs beyond the high school.

The study is being directed by Dr. J. Kenneth Little, Professor of Education and Director of Institutional Studies, University of Wisconsin, under an agreement with the United States Office of Education as part of its cooperative research program in higher education. Collaborating in the project are Dr. Clifford S. Liddle, Professor of Education and Dr. L. Joseph Lins, Associate Registrar, both of the University of Wisconsin. The Wisconsin State Department of Public Instruction, together with the Wisconsin Association of Secondary School Principals, are cooperating in the study. A brief description of the project follows.

The investigation has three main purposes:

1. To establish facts which would assist in planning the state's program of higher education.
2. To search for factors which influence decisions of youth about post-high school education with special emphasis upon:
    a. High ability youth who do not go to degree granting institutions.
    b. High ability youth who do go to degree granting institutions, but do not complete degrees.
3. To test experimentally certain hypotheses about:
    a. The identification of youth of high potential achievement.
    b. Procedures to motivate college attendance. and

persistence by youth of high potential achievement.

While the project has special importance for higher education in Wisconsin, it also has general meaning for education in other states regarding: planning of statewide programs of higher education, counseling procedures, admissions policies, scholarship policies, and identification and motivation of academically talented youth.

In early 1957, the nature and scope of the project was discussed with staff members of the Office of the State Superintendent of Public Instruction and with members of the research committees of the Wisconsin Association of Secondary School Principals. Both groups endorsed the project and cooperated in carrying out the study.

A student questionnaire (see Appendix) to inquire into the post-graduation plans of high school seniors was developed by the staff with the cooperation and assistance of the School of Education, University of Wisconsin. It consisted of thirty items, each usually made up of several alternatives and a free response, pre-designed for coding and machine analysis.

In addition to asking about the post-high school plans of the seniors, the questionnaire also sought other information relating to their families, high school careers, and the prospect of military service for the boys. Specifically, questions were asked concerning the education and occupation of the parents, economic status of the family, subjects studied in high school, encouragement received from parents and teachers to continue their education, and other such circumstances which might influence the decisions of high school graduates about education beyond high school. In addition, an important question involved the opinions of the graduates toward the value of a college education.

In April, this survey of the 1957 high school graduates was begun in earnest. As a first step, letters (see Appendix) were sent to the principals of Wisconsin high schools explaining the project and requesting their cooperation in providing needed information. Shortly thereafter, another letter was addressed to the principals further explaining the study and enclosing instructions for the administration of the questionnaires which were then being mailed to the schools (see Appendix).

All public high schools and all private high schools listed in available directories were requested to have their seniors who were graduating at the end of the spring term answer the questionnaires. Approximately 40,000 forms were distributed to these schools, and almost all of them cooperated in administering the survey forms. By the end of summer, 1957, 407 public and forty-seven private high schools, or ninety-one per cent of all high schools, had returned completed questionnaires. Approximately 35,000 students, or ninety-five per cent of all Wisconsin high school seniors graduating in the spring of 1957 completed the questionnaire.

In addition to administering the questionnaires, each participating high school was requested to furnish the following information:

1. An alphabetized list of the names of seniors graduating in the spring of 1957.
2. The class rank of each graduating senior.
3. A list of the names of students, regardless of their class rank or intelligence, who, in the judgment of teachers or counselors, possess high potential in some area which should be further developed by more education.

Although most of the high schools returned this information together with their completed questionnaires, some did not. Accordingly, additional letters (see Appendix) were sent to these schools requesting this data.

Clerical assistants were employed to help organize and prepare the completed questionnaires for analysis. In doing this, each questionnaire was assigned a six-digit code number identifying it by both school and student. Graduates who were reported by their teachers or counselors as having high potential in a particular area had a special notation to this effect written at the top of their questionnaire. Class rank furnished by the schools on each senior was indicated on the forms.

Intelligence test scores on most of the seniors were available from the records of the Student Counseling Center, University of Wisconsin. This Center directs a state-wide testing program for the Wisconsin Association of Secondary

School Principals in which more than ninety per cent of Wisconsin high schools participate. The Henmon-Nelson Test of Mental Ability is used in the program.

During the summer and fall months of 1957, the questionnaires were coded for machine processing, and a sample of the total number of questionnaires was drawn for preliminary analysis. This sample was composed of one-sixth or 5,675 of the total number of survey forms. Thus, each participating high school was represented by one out of six of its graduates. The individuals representing each school were selected by use of a table of random numbers.

The same sample was used for a follow-up survey of the parents of these graduates in the fall of 1957. Another questionnaire and letter (see Appendix) were developed by Professor Little and other staff members and sent to the parents of the graduates in the sample. The letter explained why the parents were being contacted and told of the importance of the parental survey.

The questionnaire requested the parents to tell what their children were then doing -- whether they had continued on to school, were employed, in the military service, or engaged in some other activity. The parents were also asked if they had encouraged their children to seek further education, whether or not they had advised their children to prepare for college while still in high school, and inquired of their economic circumstances. As with the student questionnaire, the parents also indicated their opinions regarding the values of a college education.

The following chapter presents a description of the scholastically talented youths in this study. Factors included are age, place of residence, type of school attended, size of high school graduating class, and ranks in class and on the Henmon-Nelson Test of Mental Ability.

# CHAPTER IV

## SUBJECTS OF THE STUDY

This chapter presents a definition and description of the scholastically talented students comprising the study population of this investigation.

In the spring of 1957, approximately 34,000 or ninety-five per cent of _all_ Wisconsin high school graduating seniors reported their plans beyond high school. That fall a stratified random sample of over 5,500 of these graduates was selected for study.

### _Defining the Population of This Study_

The subjects of the present investigation are 772 scholastically talented students who were drawn from the random sample according to two criteria. Every student selected had a final class rank in the 75-99 percentiles upon graduation from high school and _also_ ranked between the 75-99 percentiles on the Henmon-Nelson Test of Mental Ability. Of these 772 academically superior students, 312 were male and 460 were female. This group comprises slightly over fourteen per cent of the total sample.

These subjects do not represent a rigorously chosen random sample. However, it is felt that for several reasons confidence can be placed in their being a representative sample of all the students in the total population who ranked between the 75-99 percentiles in both their class rank and on the Henmon-Nelson Test of Mental Ability.

First, the sample from which the subjects were chosen was a stratified random sample of the total population of about 34,000 graduating seniors of both public and private high schools in Wisconsin. Male and female subjects were divided almost equally -- 48.6 per cent male and 51.4 per cent female. Every participating high school was represented by one out of every six of its graduates and every senior had an equal chance of being selected for the sample.

Second, the number of subjects being studied was large, and there was an almost one hundred per cent return on the follow-up questionnaire. Out of 799 scholastically talented students in the sample, 772 or a 96.6 per cent return was realized.

Third, analyses were made of both the random sample and the total population subjects as regards certain of the variables on the questionnaires. These analyses revealed that the subjects in the sample approximate very closely the total population in the variables studied. Comparative figures depicting this high degree of agreement are presented in the Appendix. Data are given for the six variables which are also used in the present investigation: education of the parents, occupation of the father, economic status of the family, ability of the parents to help finance a college education, parental encouragement given children to seek a college education, and amount of influence the children said their parents had on their after-high school plans.

Therefore, it is felt that within reason whatever is typical of the subjects in the present investigation is also typical of all the other scholastically talented youths in the total population.

## The Subjects as Seniors in High School

The following factors are used to describe the subjects while still in high school:

Age in years when the questionnaire was answered
Counties in the state in which they resided
Type of high school attended
Size of high school graduating class
High school class rank
Rank on the Henmon-Nelson Test of Mental Ability

### Ages of the Subjects

Information relative to the ages of the seniors at the time they completed the survey forms was obtained by asking each individual to state his age in years in the space provided on the questionnaire.

Table 1 reveals that almost all of the male students (96.1%) and the female students (98.3%) were between the ages of seventeen and eighteen upon answering the questionnaires immediately prior to their graduation from high school. The mean age for the boys was 17.5 years and for the girls 17.4 years. Only eleven seniors were sixteen years of age at this time and three were nineteen. Six individuals failed to indicate their ages. Thus, the ages in years of these scholastically talented students just before graduating from high school approximates quite closely the age at which the average young person graduates from the secondary school.

TABLE 1

DISTRIBUTION OF THE AGES IN YEARS OF THE SUBJECTS AT THE TIME THEY COMPLETED THE QUESTIONNAIRES

| | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| Age (years) | N | % | N | % | N | % |
| 16 | 5 | 1.6 | 6 | 1.3 | 11 | 1.4 |
| 17 | 167 | 53.5 | 279 | 60.7 | 446 | 57.8 |
| 18 | 133 | 42.6 | 173 | 37.6 | 306 | 39.6 |
| 19 | 2 | 0.7 | 1 | 0.2 | 3 | 0.4 |
| No response | 5 | 1.6 | 1 | 0.2 | 6 | 0.8 |
| Total | 312 | 100.0 | 460 | 100.0 | 772 | 100.0 |

## Area of the State in Which the Subjects Resided

Each student was requested to state his home address on the questionnaire. From this the names of the cities or towns in which the students lived were placed in the proper counties upon consulting *Polk's Wisconsin State Gazetteer* (69). The distribution of the students throughout the state can be seen in Table 2.

TABLE 2

DISTRIBUTION BY COUNTIES IN WHICH THE SUBJECTS RESIDED

| | Male | Female | Total | |
|---|---|---|---|---|
| County | N | N | N | % |
| Adams | - | - | - | - |
| Ashland | 3 | 3 | 6 | 0.8 |
| Barron | 5 | 10 | 15 | 1.9 |
| Bayfield | 1 | 1 | 2 | 0.3 |
| Brown | 14 | 17 | 31 | 4.0 |
| Buffalo | 4 | 1 | 5 | 0.7 |
| Burnett | 1 | - | 1 | 0.1 |
| Calumet | - | 3 | 3 | 0.4 |
| Chippewa | 8 | 4 | 12 | 1.6 |
| Clark | - | 4 | 4 | 0.5 |
| Columbia | 7 | 8 | 15 | 1.9 |
| Crawford | 3 | 2 | 5 | 0.7 |
| Dane | 18 | 28 | 46 | 6.0 |
| Dodge | 4 | 4 | 8 | 1.0 |
| Door | 1 | 3 | 4 | 0.5 |
| Douglas | 3 | 7 | 10 | 1.3 |
| Dunn | - | 1 | 1 | 0.1 |
| Eau Claire | 8 | 8 | 16 | 2.1 |
| Florence | - | 1 | 1 | 0.1 |
| Fond du Lac | 4 | 9 | 13 | 1.7 |
| Forest | - | 1 | 1 | 0.1 |
| Grant | 3 | 7 | 10 | 1.3 |
| Green | 4 | 1 | 5 | 0.7 |
| Green Lake | - | 1 | 1 | 0.1 |
| Iowa | 2 | 1 | 3 | 0.4 |

## TABLE 2 -- Continued

| | Male | Female | Total | |
|---|---|---|---|---|
| County | N | N | N | % |
| Iron | 2 | 2 | 4 | 0.5 |
| Jackson | - | - | - | - |
| Jefferson | 4 | 6 | 10 | 1.3 |
| Juneau | 3 | - | 3 | 0.4 |
| Kenosha | 5 | 9 | 14 | 1.8 |
| Kewaunee | - | 4 | 4 | 0.5 |
| La Crosse | 8 | 8 | 16 | 2.1 |
| La Fayette | 3 | 1 | 4 | 0.5 |
| Langlade | 1 | 2 | 3 | 0.4 |
| Lincoln | 2 | 2 | 4 | 0.5 |
| Manitowoc | 8 | 10 | 18 | 2.3 |
| Marathon | 10 | 10 | 20 | 2.6 |
| Marinette | 4 | 6 | 10 | 1.3 |
| Marquette | 2 | 1 | 3 | 0.4 |
| Milwaukee | 74 | 88 | 162 | 21.0 |
| Monroe | 3 | 4 | 7 | 0.9 |
| Oconto | 2 | 4 | 6 | 0.8 |
| Oneida | 3 | 3 | 6 | 0.8 |
| Outagamie | 5 | 13 | 18 | 2.3 |
| Ozaukee | - | 1 | 1 | 0.1 |
| Pepin | 1 | 1 | 2 | 0.3 |
| Pierce | 3 | 2 | 5 | 0.7 |
| Polk | 4 | 3 | 7 | 0.9 |
| Portage | 2 | 5 | 7 | 0.9 |
| Price | 2 | 3 | 5 | 0.7 |
| Racine | 8 | 18 | 26 | 3.3 |
| Richland | 1 | 3 | 4 | 0.5 |
| Rock | 7 | 11 | 18 | 2.3 |
| Rusk | 1 | 2 | 3 | 0.4 |
| Sauk | - | 4 | 4 | 0.5 |
| Sawyer | - | 3 | 3 | 0.4 |
| Shawano | 1 | 6 | 7 | 0.9 |
| Sheboygan | 10 | 16 | 26 | 3.3 |
| St. Croix | 6 | 2 | 8 | 1.0 |
| Taylor | 1 | 3 | 4 | 0.5 |

TABLE 2 -- Continued

| | Male | Female | Total | |
|---|---|---|---|---|
| | N | N | N | % |
| Trempleau | 2 | 3 | 5 | 0.7 |
| Vernon | 2 | 2 | 4 | 0.5 |
| Vilas | 2 | 1 | 3 | 0.4 |
| Walworth | 3 | 8 | 11 | 1.4 |
| Washburn | - | 2 | 2 | 0.3 |
| Washington | 1 | 8 | 9 | 1.2 |
| Waukesha | 4 | 24 | 28 | 3.6 |
| Waupaca | 5 | 5 | 10 | 1.3 |
| Waushara | - | 2 | 2 | 0.3 |
| Winnebago | 7 | 20 | 27 | 3.5 |
| Wood | 7 | 4 | 11 | 1.4 |
| Total | 312 | 460 | 772 | 100.0 |

This table shows that all of Wisconsin's seventy-one counties except the two central counties of Adams and Jackson are represented in this study. The boys resided in fifty-seven of the counties. The fourteen counties that did not contribute male subjects were predominantly in the central and northern parts of the state.

The girls lived in almost all or sixty-seven of the counties. The four counties that failed to provide female subjects were, as with the boys, in central and northern Wisconsin. Therefore, county-wise, the female subjects were somewhat more widely distributed regarding their place of residence. This is probably due to the fact that there were 148 more girls than boys involved in the study.

Generally, the counties in the southeastern quarter of the state are represented by larger numbers of the graduates. This is, of course, the part of the state containing proportionately the greater part of the population. Milwaukee County, as would be expected with its nearly three-fourths of a million population, is represented by twenty-one per cent of the total graduates, divided almost equally between males and females. The next largest group resided in Dane County.

Because of their sparser populations, the northernmost tier of counties along with those of north-central Wisconsin -- Marathon County excepted -- are represented by the least number of talented graduates.

An outline map of the state of Wisconsin depicting the counties and the exact number of male and female graduates of this investigation residing in each is included in the Appendix.

## Types of High Schools Attended by the Subjects

Information relative to the types of high schools attended by the seniors was obtained from booklets prepared by the Director of the Survey for purposes of coding the questionnaires. When it was not known if a certain school was public or private, this information was obtained from a directory of high schools in Wisconsin.

Table 3 indicates that 259 (83.0%) of the male students attended public secondary schools and 396 (86.1%) of the female students attended similar type schools. Fifty-three boys (17.0%) and sixty-four girls (13.9%) attended privately supported and administered high schools . Most of these went to church affiliated schools with a scattered few enrolled in other private or military academies. In summary, 655 (84.8%) of the graduates involved in this study attended publicly supported secondary schools, and 109 (15.2%) attended privately supported high schools. Thus, both public schools and various types of private schools are included in this study.

TABLE 3

DISTRIBUTION OF THE TYPES OF HIGH SCHOOLS THE SUBJECTS ATTENDED

| | N | % | N | % | N | % |
|---|---|---|---|---|---|---|
| Public | 259 | 83.0 | 396 | 86.1 | 655 | 84.8 |
| Private | | | | | | |
| Church affiliated | 47 | 15.1 | 62 | 13.5 | 109 | 14.1 |
| Academy | 3 | 1.0 | - | - | 3 | 0.4 |
| Naval and military | 2 | 0.6 | - | - | 2 | 0.3 |
| University and college affiliated | - | - | 1 | 0.2 | 1 | 0.1 |
| Other | 1 | 0.3 | 1 | 0.2 | 2 | 0.3 |
| Total | 312 | 100.0 | 460 | 100.0 | 772 | 100.0 |

## Sizes of the High School Graduating Classes

It was also deemed advisable to describe the subjects in terms of the sizes of their high school graduating classes. For purposes of analyzing the random sample in the larger study according to this criterion, it was decided to divide the schools into four approximately equal groups. In order to keep the present investigation in line as much as possible with the overall study, the same division was used. Data concerning the sizes of the graduating classes in the various schools were obtained from the alphabetical lists of the seniors compiled by the high school principals.

### TABLE 4

### DISTRIBUTION OF THE SUBJECTS ACCORDING TO THE SIZE OF HIGH SCHOOL GRADUATING CLASS

| | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| Size of Class | N | % | N | % | N | % |
| 0-59 | 78 | 25.0 | 102 | 22.2 | 180 | 23.3 |
| 60-119 | 71 | 22.8 | 109 | 23.7 | 180 | 23.3 |
| 120-259 | 80 | 25.6 | 114 | 24.8 | 194 | 25.1 |
| 261- | 83 | 26.6 | 135 | 29.3 | 218 | 28.3 |
| Total | 312 | 100.0 | 460 | 100.0 | 772 | 100.0 |

The table reveals that the four-fold division of the high schools according to the sizes of their graduating classes is numerically almost equal. The small school graduating classes comprising up to fifty-nine students contributed a total of seventy-eight males (25.0%) and 102 females (22.2%). Schools having from sixty to 119 graduates totaled seventy-one males (22.8%) and 109 females (23.7%).

The larger schools also had a very nearly equal distribution of the sexes. High schools graduating 120 to 259 students had eighty boys (25.6%) and 114 girls (24.8%) in this study. The largest schools that totaled upward of 261 students were represented by the greatest number of seniors -- eighty-three males (26.6%) and 135 females (29.3%).

Thus, it can be seen that this investigation includes an almost balanced representation of males and females from the various sized schools.

## High School Class Ranks of the Subjects

Another method of describing the subjects concerns their class ranks upon graduation from high school. These were obtained from the high school principals and affixed to the questionnaires. The following table shows the distribution of both the male and female graduates arranged in a percentile range from 75 to 99.

The mean class rank for the male graduates is 87.53 and for the female graduates 89.43. The middle rank for

## TABLE 5

## DISTRIBUTION OF THE SUBJECTS BY HIGH SCHOOL CLASS RANK

| | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| Percentile | N | % | N | % | N | % |
| 99 | 16 | 5.1 | 30 | 6.5 | 46 | 6.0 |
| 98 | 16 | 5.1 | 32 | 6.9 | 48 | 6.2 |
| 97 | 9 | 2.9 | 37 | 8.0 | 46 | 6.0 |
| 96 | 12 | 3.8 | 27 | 5.9 | 39 | 5.2 |
| 95 | 13 | 4.2 | 23 | 5.0 | 36 | 4.7 |
| 94 | 16 | 5.1 | 26 | 5.7 | 42 | 5.4 |
| 93 | 17 | 5.4 | 15 | 3.3 | 32 | 4.1 |
| 92 | 13 | 4.2 | 20 | 4.3 | 33 | 4.3 |
| 91 | 8 | 2.6 | 22 | 4.8 | 30 | 3.9 |
| 90 | 19 | 6.1 | 18 | 3.9 | 37 | 4.8 |
| 89 | 9 | 2.9 | 16 | 3.5 | 25 | 3.2 |
| 88 | 8 | 2.6 | 14 | 3.0 | 22 | 2.8 |
| 87 | 14 | 4.5 | 11 | 2.4 | 25 | 3.2 |
| 86 | 12 | 3.8 | 21 | 4.6 | 33 | 4.3 |
| 85 | 10 | 3.2 | 12 | 2.6 | 22 | 2.8 |
| 84 | 11 | 3.5 | 23 | 5.0 | 34 | 4.4 |
| 83 | 14 | 4.5 | 13 | 2.8 | 27 | 3.5 |
| 82 | 18 | 5.8 | 17 | 3.7 | 35 | 4.5 |
| 81 | 17 | 5.4 | 18 | 3.9 | 35 | 4.5 |
| 80 | 6 | 1.9 | 15 | 3.3 | 21 | 2.7 |
| 79 | 13 | 4.2 | 13 | 2.8 | 26 | 3.4 |
| 78 | 9 | 2.9 | 11 | 2.4 | 20 | 2.6 |
| 77 | 10 | 3.2 | 11 | 2.4 | 21 | 2.7 |
| 76 | 8 | 2.6 | 9 | 2.0 | 17 | 2.2 |
| 75 | 14 | 4.5 | 6 | 1.3 | 20 | 2.6 |
| Total | 312 | 100.0 | 460 | 100.0 | 772 | 100.0 |

the males is 87-88 and for the females 91. For the boys, the most frequently appearing rank is found at the ninetieth percentile and for the girls at the ninety-seventh percentile. The number of class ranks for the boys ranges from a minimum of six at the eightieth percentile to a maximum of nineteen at the ninetieth percentile. For the girls the range is from six at the seventy-fifth percentile to thirty-seven at the ninety-seventh percentile.

In comparing the class ranks of the male and female graduates, it can be seen that the latter made somewhat better grades during their high school careers than the former. Thus, it appears that the scholastically talented girls worked more diligently at their studies resulting in higher grades in high school than those made by their male counterparts.

## Henmon-Nelson Test Ranks of the Subjects

Percentile rankings on the Henmon-Nelson Test of Mental Ability are also used to describe the subjects. This information was obtained from the records at the Student Counseling Center, University of Wisconsin. The percentile ranking of each subject was written on his questionnaire.

Table 6 shows that the mean rank for the males is 89.79 and for the females 88.61. The middle rank for the male graduates is ninety-one and for the female graduates ninety. For the boys, the number of ranks ranges from one at six different points on the scale to thirty-one at the ninety-ninth percentile level. The girls range from one at three different levels to forty-one at the eighty-eighth level.

## TABLE 6

## DISTRIBUTION OF THE SUBJECTS BY THE HENMON-NELSON TEST OF MENTAL ABILITY

| | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| Percentile | N | % | N | % | N | % |
| 99 | 31 | 9.9 | 25 | 5.5 | 56 | 7.3 |
| 98 | 19 | 6.1 | 23 | 5.0 | 42 | 5.4 |
| 97 | 19 | 6.1 | 25 | 5.5 | 44 | 5.7 |
| 96 | 15 | 4.8 | 14 | 3.0 | 29 | 3.8 |
| 95 | 16 | 5.1 | 36 | 7.8 | 52 | 6.7 |
| 94 | 23 | 7.5 | 26 | 5.7 | 49 | 6.4 |
| 93 | 19 | 6.1 | 29 | 6.3 | 48 | 6.2 |
| 92 | 1 | 0.3 | 3 | 0.7 | 4 | 0.5 |
| 91 | 20 | 6.4 | 22 | 4.8 | 42 | 5.4 |
| 90 | 23 | 7.5 | 27 | 5.9 | 50 | 6.5 |
| 89 | 1 | 0.3 | 2 | 0.4 | 3 | 0.4 |
| 88 | 20 | 6.4 | 41 | 8.9 | 61 | 7.9 |
| 87 | 1 | 0.3 | 2 | 0.4 | 3 | 0.4 |
| 86 | 20 | 6.4 | 37 | 8.0 | 57 | 7.3 |
| 85 | - | - | 1 | 0.2 | 1 | 0.1 |
| 84 | 20 | 6.4 | 32 | 6.9 | 52 | 6.7 |
| 83 | 1 | 0.3 | 4 | 0.9 | 5 | 0.6 |
| 82 | 3 | 1.0 | 1 | 0.2 | 4 | 0.5 |
| 81 | 17 | 5.4 | 39 | 8.5 | 56 | 7.3 |
| 80 | 1 | 0.3 | 3 | 0.7 | 4 | 0.5 |
| 79 | 19 | 6.1 | 30 | 6.5 | 49 | 6.4 |
| 78 | 2 | 0.6 | 1 | 0.2 | 3 | 0.4 |
| 77 | 1 | 0.3 | 2 | 0.4 | 3 | 0.4 |
| 76 | 16 | 5.1 | 33 | 7.2 | 49 | 6.4 |
| 75 | 4 | 1.3 | 2 | 0.4 | 6 | 0.8 |
| **Total** | 312 | 100.0 | 460 | 100.0 | 772 | 100.0 |

In contrast to the final high school class ranks of these students in which the girls seem superior, almost the exact reverse is true in considering their respective ranks on the Henmon-Nelson Test of Mental Ability. Thus, considering intellectual ability as measured by this test, the academically superior male students outrank their female classmates. However, the girls seem to be more diligent in the application of their ability to their school tasks which results in higher class standings.

### Subjects Identified as Outstanding

Of the 772 scholastically talented subjects of this study, 267 (34.6%) were identified as outstanding students, who, in the judgment of their high school teachers or counselors, possessed high potential in some area which should be further developed by more education. In this group of 267, there were 126 (47.2%) boys and 141 (52.8%) girls.

Eighty-nine (70.7%) of these boys were identified as having high academic potential. Within this classification, the majority showed high ability for mathematics and the sciences. Among the other areas of excellence pointed out were sixteen in general ability, eight in industrial arts, six in leadership, three in music, two in extra-curriculars such as forensics and debate, and two in agriculture.

The majority of the girls identified as outstanding also showed highest potential in academic fields -- 106 or 75.2 per cent. The remaining showed especially high ability as follows: thirteen in general areas, seven in music, five in leadership, four in fine arts, four in management such as homemaking, one in physical education, and one in extra-curriculars.

Although all of the subjects of this study were considered as scholastically talented by the criteria used, over one-third were further identified as having exceptional abilities in certain areas. Boys and girls were cited in almost equal numbers, and both sexes excelled in academic areas. Many were judged outstanding in more than one field.

The next chapter describes the survey of the parents which is the focus of this investigation. Also related is the writer's participation in the research and the procedures used in making this special study of scholastically talented youth.

# CHAPTER V

# DESIGN OF THE STUDY

The methods used in the follow-up of the parents of the scholastically talented students and the procedures used in this study are related in the following pages. Also included is the description of the preliminary analysis of the questionnaires and the determination of the specific area for this investigation.

In the summer of 1957, the writer was appointed research assistant to Dr. J. Kenneth Little, Director of the Survey of High School Seniors (see Chapter III). The position offered experience in research seldom available to graduate students. In addition, there was a good possibility that somewhere in the mass of data already collected and yet to be collected would be found the basic materials for a doctoral dissertation.

The writer soon became acquainted with the numerous facets of the research projects during which time he sought to define an area for his investigation. However, it was not until several months later when the parental survey was under way that a problem was defined.

The data used in this study came from responses by high school seniors and their parents to questionnaires. As related in Chapter III, the students answered a survey form in the spring of 1957.

Collecting the Data from the Parents

The research plan called for a survey of the parents of the 1957 high school graduates. The random sample chosen in June of 1957 was used in this parental follow-up. The Director of the Survey, together with the Joint Staff, developed a letter and a questionnaire (see Appendix) to be used in surveying the parents.

Briefly, the parents were asked to report on what their children were then doing, whether or not they had wanted their children to continue education beyond high school, and if they had advised them to prepare for college. Other questions concerned the economic status of their family as compared to other families in their community and the parents' opinions concerning the values of a college education.

As set forth in the original design of the research, the purposes of the parental survey were to provide an opportunity to study: first, the factors which are reported as influencing the post-high school decisions of youth; secondly, the probable causation of these factors; and finally, the possibilities of redirecting these influences.

## Original Survey of the Parents

During late October and early November of 1957, approximately 5,500 letters and questionnaires (see Appendix) were addressed to the parents of the graduates. Each received a form letter explaining the purpose and importance of the survey. Self-addressed stamped envelopes were enclosed for the parents' responses.

Many of the questionnaires were completed and returned within several weeks after the original mailing. There was a slow but steady return of the forms through the end of the year. By January, 1958, about twenty-nine per cent of the parents had responded. The fact that more questionnaires were still returning delayed a follow-up at that time.

## Preliminary Analysis of the Parental Questionnaires

As the parents' questionnaires were returned, they were matched according to a code number with those completed by their children. During the latter part of December the returned questionnaires were tabulated to obtain a general picture of what the graduates were then doing and to find out how their parents viewed higher education. This preliminary analysis was used by the Director of the Survey in his reports to the Office of Education and to the Coordinating Committee for Higher Education in Wisconsin, to which he was directly responsible for the parental survey.

In addition, it aided the writer in defining a problem for his dissertation.

In analyzing the returned parental questionnaires, a strong and consistent sampling bias was found. Generally, parents of high ability children who had entered degree granting institutions after high school graduation were the most prone to complete and return the questionnaires. Those whose children were of lesser ability and did not enter degree granting schools were the least apt to respond.

Specifically, the highest return of parental questionnaires was found where the children ranked in the top quartile of their graduating class in both class rank and on the Henmon-Nelson Test of Mental Ability and who enrolled in degree granting institutions. The return for this group at that time was sixty-three per cent.

The next highest response was from the parents whose children ranked in the upper quartile of their graduating class in either class rank or on the Henmon-Nelson Test and had continued their education but not necessarily in degree granting schools. The return from this group was about forty-eight per cent.

The fewest survey forms were received from the parents of children who ranked in the lowest quartile of their graduating class in both class rank and on the Henmon-Nelson Test.

## First Follow-Up of the Parents

By early March of 1958 the returns from the original mailing to the parents had almost ceased, and it became evident that a follow-up letter would be needed to increase the percentage of responses. Accordingly, on March 20, the first follow-up of approximately 2,250 parents who had not responded to the original questionnaire was made. There was sent to each another survey form, a self-addressed stamped envelope, and a mimeographed form letter (see Appendix) restating the importance of the survey and asking the non-respondent to reply at his earliest convenience. By early April the total return had reached forty-three per cent with some questionnaires still being returned.

As previously noted, a sampling bias had been detected in analyzing which parents were returning completed survey forms. This same sampling bias persisted in the returns from the first follow-up. At this point, the replies from the parents of the children who ranked in the top quartile of their graduating class in both class rank and on the Henmon-Nelson Test had increased by seventeen per cent to a total of eighty per cent.

## Limiting the Area of Investigation

During the early phases of the parental survey the writer had tentatively decided upon an area for his special investigation. Conditioning this decision was the fact that one of the major purposes of the over-all project was to search for factors which seem to influence high ability youth in their decisions about education beyond high school.

As previously indicated, it was noted that the parents of high ability children responded more readily to the questionnaire than did the parents of children of lesser abilities. This fact, together with the ever increasing attention that our society has been giving to the development of high ability youth, indicated a problem worthy of further investigation.

Specifically, as related in the first chapter, the decision was made to study possible parental influences upon the post-secondary school educational decisions of scholastically talented youth, that is, of those who ranked between the 75 and 99 percentiles both in class rank and on the Henmon-Nelson Test of Mental Ability.

## Second Follow-Up of the Parents

One of the immediate tasks was to attempt to increase the number of responses to the questionnaire from the parents of these scholastically talented youths. Therefore, a second follow-up was made on April 8 of 150 of those parents who had failed to respond to the first two requests. As previously, a mimeographed form letter, a survey form, and a self-addressed envelope were enclosed.

But, this time a brief handwritten personal note addressed to the parents (see Appendix) was also attached to the form letter. This personal appeal helped to increase the number of respondents by some nine per cent to a total of eighty-nine per cent.

Approximately two weeks later when the returns from the third mailing had almost ceased, several other methods were resorted to in hopes of increasing the total number of responses.

## Other Methods Used in Follow-Up of the Parents

Both local and long distance telephone calls to nearby cities elicited a few more responses. Personal friends throughout the state assisted in contacting non-responding parents in their areas and requesting cooperation in returning the completed questionnaires. A number of trips were made to various cities where there were sufficient outstanding survey forms to make it profitable. Here parents were contacted by personal visits to their homes or by telephone calls. These various efforts were not made in vain, for they increased the responses by some five per cent to a total of slightly more than ninety-four per cent.

It should be added that almost all of the parents who were contacted personally gave willingly of the information requested even going to great lengths to apologize and explain why they had not complied earlier. A few hesitated at first, but when the purposes of the survey and study were re-explained, they cooperated fully. However, in one very unusual case the parent outrightly refused to supply any information bluntly stating that "it is nobody's business what my child is now doing and what I think about college." Yet his tirade, although he was unaware of it, furnished the answers to the entire questionnaire!

## Third Follow-Up of the Parents

On April 24, a final effort was made in a third follow-up to contact thirty-five parents who still had not been heard from. This time each parent received a personally typewritten letter (see Appendix) which told of the favorable response thus far and asked each to send in his completed questionnaire so that a one hundred per cent return could be realized for the study. This "last ditch" effort resulted in increasing the final number of replies by two and one-half per cent.

## Total Questionnaire Return

All of the concentrated efforts to realize as large a return as possible proved fruitful, for the total number of responses received was 773, or 96.7 per cent of the 799 questionnaires sent. Four of the parents could not be located because of improper addresses or because they had moved without leaving a forwarding address. In spite of the various appeals, twenty-two still failed to return the questionnaire. One response was received too late to be included in the analysis. In all, the final number of usable questionnaires was 772, or 96.6 per cent of the original population. Table 7 gives an analysis of the returned questionnaires.

TABLE 7

ANALYSIS OF QUESTIONNAIRE RETURN FROM PARENTS

| | N | % |
|---|---|---|
| Original number sent | 799 | 100.0 |
| Non-responses | 26 | 3.3 |
| Non-usable questionnaires | 1 | 0.1 |
| Total usable questionnaires | 772 | 96.6 |

Because of this high percentage of returns, it was decided not to make a special analysis of the non-respondents to ascertain whether or not they were typical of the entire group. It was felt that within reason the things that were typical of and characterized the 772 subjects were also true of the twenty-seven non-responding subjects.

## Procedures Used in the Study

As previously described, the parents' questionnaires were matched according to a code number with those completed by their children. These sets were then separated according to sex. They were further sub-divided into two groups: students enrolled in degree granting institutions and those not attending such schools. This last group included those youths who after graduating from high school enrolled in non-degree schools, entered the labor market, joined the armed forces, were unemployed, and the girls who were married and had become homemakers.

In December of 1957, as already related, both the student and the parental questionnaires were tabulated to obtain a preliminary general view of what the graduates were then doing and to learn what influenced them in their decisions about education beyond high school. Selected from this analysis for study regarding these talented graduates were seven variables from the student questionnaire and three from the parental survey form.

### Variables From the Student Questionnaire

1. Education of Parents - A score on this variable referred to the highest level of education attained by both the father and mother separately. It was obtained from the response to item 7 in which the highest level achieved by

each of the parents was checked on the following scale:

- High school
  - did not attend
  - attended
  - graduated from
- Trade or business school
  - attended
- College
  - attended
  - graduated from
  - has master's or Ph.D. degree
- Do not know

2. Occupation of Father - A score on this variable referred to the type of work in which the father was actively engaged. It was obtained from the response to item 9, the occupational classification used on the questionnaire. However, the writer did not feel that this particular scheme of classifying occupations would be appropriate for his purposes and, therefore, devised a new system.

Sources of occupation classifications used in developing the new system were as follows: United States Employment Service as codified in the *Dictionary of Occupational Titles* (91), Berdie's Minnesota study (8:53), the categories employed in the 1950 census of population (90), and the one used in the student questionnaire. From these sources and a trial run of 250 questionnaires, there was devised a job classification system to better fit the needs of this study. It included the following classifications:

- Professional
- Executive, managerial, and official (large businesses)
- Office and clerical
- Salesman
- Owns, rents, manages small business

Agriculture (owns, rents, manages farm; fishing, forestry, conservation)
Service (domestic, personal, protective, building service, porter)
Skilled tradesman
Foreman, inspector, supervisor
Factory worker
Operative
Retired
Unemployable (sick, injured)
Deceased
No response

3. Economic Status of the Family - A measure of this variable was obtained from questionnaire item 12. It requested the student to choose one of five alternatives presented which best described the economic status of his family when compared to other families in his community. The choices were:

considerably above average
somewhat above average
average
somewhat below average
considerably below average

4. Also indicative of the economic status of the family is the answer to the question regarding the Ability of the Parents to Help Finance a College Education. Item 11 requested each person to check one of these four alternatives:

can easily afford it
can afford it, but with much sacrifice
cannot afford it
I must work to help support the family

5. Parental Encouragement to Attend College - In item 25 each student was asked to check one of the four alternatives presented indicating how much he was encouraged

by his parents to attend college after completing high school. The choices were:

want me to go to college
do not want me to go
do not care whether I go
will not let me go

6. Parental Influence on Post-High School Plans - Questionnaire item 6 asked the student to evaluate the role his parents played in helping him formulate his post-high school plans. The following three point scale was used:

not at all
some
very much

7. Student Opinions Regarding the Value of a College Education - Item 30 consisted of eighteen statements concerning the value of a college education. Each subject was requested to check the three which seemed most important to him personally, whether he was planning to attend college or not. Tabulations were made for the individual statements thus giving a total for each of the eighteen, which were as follows:

I would rather start earning money quickly, and learn on the job.
I (am) would be greatly dissatisfied to stop at my present level of knowledge.
College life and activities (like athletics) attract me very much.
College graduates get jobs with better pay.
The country needs more people who have highly developed skills and knowledge.
College is a good place to meet a worthy life-mate.
Skilled laborers get paid as much as most college graduates.
Going to college enables you to study more lines of work before deciding on a career.

A college education helps you live a happier, more complete life.
Going to college costs more than it is worth.
College studies will make you work at a high intellectual level, and I like that.
College graduates usually have the leadership positions.
Learning on a job is more practical than most school learning.
Persons who do not have college educations often make better leaders.
College life broadens you socially, and developes your personality.
Success in life depends upon ability and effort, not amount of education.
Going to college would be a waste of time for me.
Going to college has just been accepted; I have never thought of anything else.

## Variables From the Parental Questionnaire

1. Parental Advice Given to Prepare for College - A measure of this variable was obtained from item 6 which the parents checked either Yes or No according to whether or not they had advised their child to prepare for college while still attending high school. This was interpreted to mean whether or not the parents had encouraged their child to attend college. A score was obtained by adding the number of Yes and No responses.

2. Economic Status of the Family - A measure of the economic status of the family compared to that of other families in their community was obtained from item 7 by having the parents check a three point scale. The possible responses were:

above average
average
below average

3. Parental Opinions Regarding the Value of a College Education - Item 8 consisted of thirteen statements concerning the value of a college education. Parents were asked to check those which best expressed their own opinions. The statements were as follows:

It is better to learn a job, skill or trade than to go to college.
A college education is worth making the financial sacrifice it requires.
Success in life depends upon ability and effort, not amount of education.
Persons who do not have a college education are at a social disadvantage in life.
Going to college costs more than it is worth.
The school of "hard knocks" is more valuable than a college education.
A college education is required to get good jobs and to advance in them.
You do not need a college education to earn good money and be leaders in your communities.
People with a college education live more satisfying and interesting lives than those without a college education.
Too many young people are going to college.
Too many capable young people who desire to go to college are not able to go.
Going to college is not worth while for many people who go.
People who learn on the job, use libraries, and teach themselves are as well-educated as those who go to colleges.

## Stability of the Graduates' General Plans

A separate analysis designed to answer one of the related questions of the investigation was made to determine the stability of the graduates' general plans. That is, it aimed at determining whether or not the graduates were doing in the fall what they had planned during April and May of their senior year in high school. This analysis included only the broad categories of degree and non-degree granting schools attended, work, military service, and marriage. The results are reported in Chapter VII. Chapter VIII relates a detailed account of the specific activities of the graduates in the fall of 1957.

The first item on the student questionnaire requested each subject to place a check before one of six possible plans beyond high school. They were:

To continue going to school
To get a job
To become an apprentice
To go into military service
To work at my home
I have no definite plans
Other, specify ________

If the student was planning to continue his education after graduating from high school, he was asked to check one point of item 2 which listed broad categories of schools. These were:

- Public
  - Vocational school
  - County teachers college
  - State college
  - University
- Private
  - Liberal arts college
  - University
  - Business or trade school
  - Other, specify ________

As a part of this second item, the student was asked to indicate if he planned to attend school outside of the state of Wisconsin.

The first item on the parental questionnaire verified the graduate's plan of the previous spring. Here the parent checked one of six categories indicating what his child was then doing. The possibilities were:

- Has a job
- Is in military service
- Is married and is a homemaker
- Is continuing education through correspondence study
- Is unemployed
- Is going to school
- Other ________

If the parent chose to write a brief explanation concerning his child's activity, an attempt was made to classify it in one of the broad areas listed, or if that was not possible, new categories were devised.

If the graduate was attending school, part (b) of the first item asked the parent to indicate if his child was attending full-time or part-time. Item 2 furnished precise information regarding the school; here the parent gave the name and location of the school.

The determination as to whether or not the student was attending a degree or non-degree granting institution was made from the parent's response to item 2 and by consulting one of the following standard references on American higher education: *The College Blue Book* (12), *Lovejoy's College Guide* (55), and *American Universities and Colleges* (44).

## Specific Activities of the Graduates

Another analysis was made of the questionnaires to determine the specific activities of the scholastically talented subjects in the fall of 1957. It indicated the type and location of the schools attended and the activities engaged in by those graduates who did not choose to continue their education. In addition, it related what the subjects who had been identified as outstanding by their high school teachers and counselors were then doing.

Again, the parental follow-up reporting the subjects' activities as described in the previous section was the source of data for this analysis which is related in Chapter VIII.

## Validity of the Questionnaires

An important characteristic of a questionnaire is its validity. Validity is defined as the extent to which an instrument measures what it purports to measure. However, the validity of questionnaires is often difficult to establish and in some cases impossible. Previous research and the opinions of leading educators point out this problem quite clearly.

Francis F. Smith, in studying the validation of questionnaires, stated:

> Usually, investigators who use questionnaires for the collection of their data do not find it convenient or possible to determine the validity of such data. In fact, it is this very inconvenience or impossibility of collecting data by more direct means which causes them to resort to the questionnaire. If the investigator found it feasible to collect more directly data

> which might serve as a criterion against which to validate his questionnaire data, he would usually find the former superior to the latter, and the latter, therefore, unnecessary or undesirable.

Smith conceded, however, that questionnaires could have validity by requiring large enough numbers of subjects to answer them so that errors of judgment and statement would neutralize one another and thereby yield a composite which would be a reasonable approximation of the truth (82:561, 574).

In attempting to ascertain the validity of the questionnaires used in this investigation, it must first be recognized that research points out that it is almost impossible to judge the validity of any questionnaire (32:623-624; 51:138-143; 82:561, 574; 85:97). The following is submitted with this in mind.

Almost all Wisconsin high schools cooperated in administering the questionnaires, and over ninety-five per cent of the graduating seniors completed them. A randomly selected sample was chosen for a follow-up of the parents. Over ninety-six per cent of the parents of the scholastically talented students of this study responded to this follow-up.

An inspection of the completed questionnaires of both students and parents reveals that almost all the items were completed with a minimum of carelessness. It also shows a range of variation in the responses and a high degree of consistency in the answers. Some of the student responses were verified by asking the same questions of their parents.

An example of this is found in the items concerning parental encouragement given their children to attend college in which the student's evaluation (item 25) can be checked against the parent's (item 6).

Although many of the items on both the student and parental questionnaires were factual, there were others that involved the judgment of the respondents for which there is no known means of measuring the validity. These responses must be considered on their merit alone.

## Reliability of the Questionnaires

The reliability of an instrument has been interpreted to mean the degree of consistency obtained between repeated measurements using the same device.

Research on the reliability of the questionnaire method by Bain (4), Cavan (14), Gordon (33), Lenz (52), Peatman (64, 65), Seham (80), Smith (82), and Wylie (101) concludes substantially the following:

1. The percentage of change in the responses of the same individuals on a retest is usually less than twenty per cent.
2. Certain items are more reliable than others; least changes are noted on objective and factual questions and most on subjective or opinion questions.
3. Scores obtained by the summation of large numbers of reactions are usually statistically reliable, and differences in specific items usually tend to neutralize one another in the total.
4. The responses of some individuals to certain questions are more reliable than those of others.

Research has thus pointed out the inadequacy of some of the methods used to determine the reliability of an instrument. Because of this and other practical considerations involving finances and the impossibility of readministering the questionnaires, reliance on the reliability of those used in this study must be placed in their construction and the internal consistency of the responses.

Probably the most important of these is the last whereby a split-half method can be used to determine how the male and female subjects responded to the questionnaire items. This can be accomplished by asking two questions: "Did the male and female subjects respond in almost equal proportions to items in which one would expect them to respond almost equally?" and, conversely, "Did they respond in unequal proportions to items in which one would expect them to respond unequally?"

Comparative figures depicting these relationships in both the sample and the total population on the variables studied in this investigation are given in the tables in the Appendix. From these tables it can be seen that with only slight variation the male and female subjects responded almost equally to the items on the education of their parents, occupation of the father, economic status of the family, and ability of their parents to help finance a college education. Almost equally proportionate responses to items such as these would, of course, be expected in a large group of mixed subjects.

However, the male and female subjects responded in disproportionate numbers on the items concerning the amount of parental encouragement given to attend college. More of the boys received encouragement than did the girls. This unequal response would be expected, for parents encourage boys more than girls to attend college. This is reflected in past and present college enrollment figures (12).

In further considering the reliability of these questionnaires, the manner in which they are constructed is noted. Although some of the items are objective and factual, many of them are not. When both types of questions are included, provisions must be made for obtaining as reliable answers as possible. Graded multiple choice items were provided in most of the variables, opportunities were afforded for the subject to reject the alternatives presented and to give a free response, minute details were not requested, and the questions concerned familiar experiences.

Some of the items were related to other items in such a manner that the responses could be checked by consulting at least two reactions. Thus, it was not necessary to rely solely on one isolated statement. An example of this is found in the family income item in which the student's evaluation (item 12) can be checked against the parent's (item 7).

Therefore, because of the construction of the questionnaire items and the distribution of responses between the male and female subjects on the various questions, it is felt that a reasonable degree of reliability can be accorded the questionnaires in this study.

## Treatment of the Data

The tabulated data were used in making descriptive and statistical comparisons on the selected variables between the parents of the scholastically talented graduates who entered degree granting institutions and the parents of similar graduates who did not enter such institutions.

For purposes of this study, the data were arranged in frequency distributions and percentages computed. In order to determine the degree of relationship or significance between the various categories in the variables, Pearson's Chi-square technique was used.

Peatman in his volume on statistical technique states:

> What the Chi-square technique does is to compare the divergence or deviation of the sample frequencies for each category studied. The greater the difference between sample frequencies and hypothetical frequencies per category, the less the probability that the differences are attributable only to chance errors of sampling and measurement. Chi-square itself is a measure that expresses the extent of the difference between hypothetical and sample results. The value of Chi-square for a given hypothesis having been computed, the probability of differences as great as those between the sample frequencies per category or class occurring on the basis of chance alone can then be estimated. In the light of this probability value, the hypothesis can then be rejected, depending on the confidence criteria used in judging the character of the result, i.e., whether or not it is a likely or unlikely result for the hypothesis (64:425-6).

The formula used in the Chi-square technique is:

$$X^2 = \sum \left[\frac{(f_s - f_h)^2}{f_h}\right]$$

where

$f_s$ = the number of sample frequencies per category or class

$f_h$ = the hypothetical frequencies for corresponding categories or classes

$\sum$ = the process of summing all the ratios for the categories or classes under consideration

In computing Chi-square values for this study in which there are only two categories for each variable, the Chi-square table is entered at one degree of freedom. The confidence level used in judging the character of the results is considered significant up to the five per cent probability level.

Some of the categories in the variables of this study were small and thus called for special treatment. In some instances the categories were combined so as to yield a total of at least five theoretical frequencies before computing the values.

The following chapter presents the main findings concerning the differences in parental background factors between the college-going and non-college-going graduates of this investigation.

# CHAPTER VI

# DIFFERENCES IN PARENTAL BACKGROUND FACTORS OF COLLEGE-GOING AND NON-COLLEGE-GOING GRADUATES

The primary purpose of this study is to determine whether there are important differences in parental background factors between youth of high mental ability and scholastic achievement who continue their education in degree granting institutions and those who do not. Among the parental factors to be investigated are education of parents, occupation of father, economic status of the family, amount of parental encouragement given to attend college, parents' influence on post-high school plans as evaluated by their children, and opinions on the value of a college education.

This chapter presents the main findings of the investigation in terms of the variables studied. The subjects have been separated according to sex and further subdivided into two groups: (1) subjects enrolled in degree granting institutions and (2) those who did not enter degree granting institutions. Data are presented in tables in which the parental background factors of these two groups are compared. In order to determine the degree of significance between the various categories among the variables, the

Chi square technique is used.*

There are 312 scholastically talented male subjects in this study. Of these, 239 (76.6%) continued their education in degree granting institutions in the fall of 1957. The remaining seventy-three boys (23.4%) did not choose to enter such schools but, rather, enrolled in non-degree institutions, sought employment, entered the military service, or were unemployed. Selected parental background factors of the 239 college-going boys are contrasted to the corresponding factors for the seventy-three boys who did not enter such schools.

Of the 460 scholastically talented female subjects, 245 (53.3%) enrolled in degree granting institutions after graduating from high school. The other 215 (46.7%) elected to enter non-degree granting schools, took jobs, were married, entered the military service, or were unemployed. Here selected parental background factors of the 245 college-going girls are compared to the same factors for the 215 girls who did not choose to enroll in such schools.

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*Chi square values are included in the tables. They are considered significant if they fall between the one and five per cent levels of probability. The direction of differences may be found by noting the greater percentage. For example, if the college-going boys had a greater percentage in a category on one of the variables than did the non-college boys and if a significant value existed, it would mean that the college-going boys were significantly superior to the non-college boys on that particular variable. The significant values are marked with asterisks.

## Findings Based on the Variables Studied

### Education of the Father

For the male subjects, the distribution of the highest level of education attained by their fathers is given in Table 8. Inspection of the data in this table reveals that significantly more of the fathers of the non-college boys than those of the college boys did not attend high school or attended but did not graduate.*

Significantly more of the fathers of the college-going boys graduated from college than did the fathers of their non-college counterparts. Although slightly below the accepted level of significance for this study, there are also more fathers of the college-going males than of the non-college males who attended college.

Table 9 shows the distribution of the highest level of education attained by the fathers of the girls. This table shows that significantly more of the fathers of the college-going girls than of the non-college girls graduated from high school. In considering those who did not attend high school, the exact opposite is true -- a very significant number of the fathers of the non-college girls did not enter

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*For purposes of differentiating between the scholastically talented subjects who continued their education in degree granting institutions and those who did not, the terms "college" and "non-college" are henceforth used.

## TABLE 8

## EDUCATION OF THE FATHER (MALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| High school | | | | | | | | |
| did not attend | 45 | 18.3 | 28 | 38.3 | 73 | 23.4 | 20.0 | 9.276* |
| attended | 22 | 9.3 | 14 | 19.2 | 36 | 11.5 | 9.9 | 5.785* |
| graduated from | 59 | 24.8 | 15 | 20.5 | 74 | 23.7 | 4.3 | 0.305 |
| Trade or business school | | | | | | | | |
| attended | 21 | 8.9 | 7 | 9.6 | 28 | 9.0 | 0.7 | 0.0 |
| College | | | | | | | | |
| attended | 18 | 7.6 | 1 | 1.4 | 19 | 6.1 | 6.2 | 3.566 |
| graduated from | 49 | 20.5 | 4 | 5.5 | 53 | 17.0 | 15.0 | 6.894* |
| has masters or Ph.D. | 18 | 7.6 | 2 | 2.7 | 20 | 6.4 | 4.9 | 2.40 |
| Do not know | 4 | 1.7 | 1 | 1.4 | 5 | 1.6 | 0.3 | - |
| No response | 3 | 1.3 | 1 | 1.4 | 4 | 1.3 | 0.1 | - |
| Total | 239 | 100.0 | 73 | 100.0 | 312 | 100.0 | | |

## TABLE 9

## EDUCATION OF THE FATHER (FEMALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| High school | | | | | | | | |
| did not attend | 33 | 13.5 | 92 | 42.8 | 125 | 27.2 | 29.3 | 37.184* |
| attended | 25 | 10.2 | 26 | 12.1 | 51 | 11.1 | 1.9 | 0.315 |
| graduated from | 62 | 25.3 | 29 | 13.5 | 91 | 19.8 | 11.8 | 7.472* |
| Trade or business school attended | 20 | 8.2 | 26 | 12.1 | 46 | 10.0 | 3.9 | 2.190 |
| College | | | | | | | | |
| attended | 23 | 9.4 | 15 | 7.0 | 38 | 8.3 | 2.4 | 0.950 |
| graduated from | 54 | 22.0 | 12 | 5.6 | 66 | 14.3 | 16.4 | 21.959* |
| has master's or Ph.D. | 22 | 9.0 | 2 | 0.9 | 24 | 5.2 | 8.1 | 13.595* |
| Do not know | 6 | 2.4 | 11 | 5.1 | 17 | 3.7 | 2.7 | - |
| No response | - | - | 2 | 0.9 | 2 | 0.4 | 0.9 | - |
| Total | 245 | 100.0 | 215 | 100.0 | 460 | 100.0 | | |

high school.

Consideration of education at the college level shows that significantly more of the fathers of the college-going females both graduated from college and earned higher degrees than did the compared group.

From the tables it is thus seen that both the male and female non-college subjects' fathers did not attend high school in significantly greater numbers than the fathers of the college-going subjects. A greater number of the college girls' fathers graduated from high school than did the non-college girls' fathers. For the males, significantly more of the non-college subjects' fathers than the college subjects' fathers attended high school but did not graduate.

The fathers of both the male and female college-going subjects graduated from college in significantly larger numbers than did the non-college subjects' fathers. Also, the fathers of the female college-going subjects had earned more higher degrees than had the non-college fathers.

### Education of the Mother

Table 10 depicts the distribution of the highest level of education attained by the mothers of the male subjects. From this table it can be seen that significantly more of the mothers of the non-college boys than of the college boys did not attend high school. The table also

## TABLE 10

## EDUCATION OF THE MOTHER (MALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| High school | | | | | | | | |
| did not attend | 34 | 14.2 | 26 | 35.6 | 60 | 19.2 | 21.4 | 13.415* |
| attended | 26 | 10.8 | 13 | 17.8 | 39 | 12.5 | 7.0 | 2.310 |
| graduated from | 71 | 29.7 | 17 | 23.3 | 88 | 28.3 | 6.4 | 0.582 |
| Trade or business school attended | 19 | 7.9 | 4 | 5.5 | 23 | 7.4 | 2.4 | 0.256 |
| College | | | | | | | | |
| attended | 21 | 8.9 | 5 | 6.8 | 26 | 8.3 | 2.1 | 0.216 |
| graduated from | 52 | 21.8 | 4 | 5.5 | 56 | 17.9 | 16.3 | 8.113* |
| has masters or Ph.D. | 7 | 2.9 | 1 | 1.4 | 8 | 2.6 | 1.5 | 1.309 |
| Do not know | 4 | 1.7 | 3 | 4.1 | 7 | 2.2 | 2.4 | - |
| No response | 5 | 2.1 | - | - | 5 | 1.6 | 2.1 | - |
| Total | 239 | 100.0 | 73 | 100.0 | 312 | 100.0 | | |

shows that significantly more of the mothers of the college-going males than of the non-college males graduated from college.

Table 11 relates this same information for the mothers of the female subjects. It shows that significantly more of the mothers of the non-college girls than of the college girls did not attend or only attended high school. The mothers of the college girls both attended and graduated from college in significantly larger numbers than did their counterparts.

A comparison of the education of the mothers for both the male and female subjects shows that significantly larger numbers of the non-college subjects' mothers than those of the college-going subjects did not attend high school. Also, more of the mothers of the non-college girls than of the college girls attended high school but did not graduate. The college subjects' mothers graduated from college in significantly greater numbers than did the mothers of the non-college subjects. In addition, the mothers of the college-going girls attended college in greater numbers than did the mothers of the non-college girls.

## Occupation of the Father

Table 12 shows the occupation of the fathers for the male subjects. The fathers of the college-going boys held significantly more executive, managerial and official

## TABLE 11

## EDUCATION OF THE MOTHER (FEMALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| High school | | | | | | | | |
| did not attend | 27 | 11.0 | 70 | 32.6 | 97 | 21.1 | 21.6 | 25.907* |
| attended | 17 | 6.9 | 32 | 14.9 | 49 | 10.7 | 8.0 | 6.636* |
| graduated from | 73 | 29.8 | 63 | 29.3 | 136 | 29.5 | 0.5 | 0.0 |
| Trade or business school attended | 30 | 12.2 | 18 | 8.3 | 48 | 10.4 | 3.9 | 1.342 |
| College | | | | | | | | |
| attended | 39 | 15.9 | 10 | 4.7 | 49 | 10.7 | 11.2 | 13.847* |
| graduated from | 54 | 22.1 | 14 | 6.4 | 68 | 14.8 | 15.7 | 19.125* |
| has master's or Ph.D. | 5 | 2.1 | - | - | 5 | 1.1 | 2.1 | - |
| Do not know | - | - | 7 | 3.3 | 7 | 1.5 | 3.3 | - |
| No response | - | - | 1 | 0.5 | 1 | 0.2 | 0.5 | - |
| Total | 245 | 100.0 | 215 | 100.0 | 460 | 100.0 | | |

# TABLE 12

## OCCUPATION OF THE FATHER (MALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Professional | 36 | 15.1 | 4 | 5.5 | 40 | 12.8 | 9.6 | 3.583 |
| Executive, managerial, official | 35 | 14.6 | - | - | 35 | 11.2 | 14.6 | 10.370* |
| Office and clerical | 14 | 5.9 | 3 | 4.1 | 17 | 5.4 | 1.8 | 0.680 |
| Salesman | 20 | 8.3 | 1 | 1.4 | 21 | 6.7 | 6.9 | 4.20 * |
| Small business | 22 | 9.2 | 7 | 9.6 | 29 | 9.3 | 0.4 | 0.0 |
| Agriculture | 30 | 12.6 | 23 | 31.5 | 53 | 17.0 | 18.9 | 13.031* |
| Service | 6 | 2.5 | 2 | 2.7 | 8 | 2.6 | 0.2 | 0.0 |
| Skilled tradesman | 12 | 5.0 | 2 | 2.7 | 14 | 4.5 | 2.3 | 0.950 |
| Foreman, supervisor, inspector | 7 | 2.9 | 1 | 1.4 | 8 | 2.6 | 1.5 | 1.446 |
| Factory worker | 48 | 20.1 | 26 | 35.6 | 74 | 23.7 | 15.5 | 6.185* |
| Operative | - | - | 1 | 1.4 | 1 | 0.3 | 1.4 | - |
| Retired | - | - | - | - | - | - | - | - |
| Unemployable | - | - | - | - | - | - | - | - |
| Deceased | 3 | 1.3 | 1 | 1.4 | 4 | 1.3 | 0.1 | - |
| No response | 6 | 2.5 | 2 | 2.7 | 8 | 2.6 | 0.2 | - |
| Total | 239 | 100.0 | 73 | 100.0 | 312 | 100.0 | | |

positions than did those of the non-college boys. The fathers of the college males also held proportionately more professional positions than did the fathers of the non-college males although it is slightly under the accepted significance level. The college boys' fathers were also engaged in significantly larger numbers as salesmen than were the comparison fathers. On the other hand, the fathers of the non-college male subjects were engaged in significantly greater numbers in agricultural pursuits and factory work.

The occupations of the female subjects' fathers are revealed in Table 13. Here it is seen that the fathers of the college-going girls held more professional, executive, managerial, official, and supervisory positions than did the fathers of the non-college girls. The fathers of the non-college females were actively engaged in significantly greater numbers in both agriculture and factory work.

In contrasting the occupations of the fathers of both the male and female college subjects, it is seen that they held significantly more executive, managerial, and official positions than did the non-college subjects' fathers. Whereas the fathers of the college boys held more sales jobs than did the non-college boys' fathers, the fathers of the college girls were employed in greater numbers in professional and supervisory positions than were the fathers of the non-college girls. The fathers of both the non-college boys and girls were employed in significantly greater numbers in agriculture and factory work.

# TABLE 13

## OCCUPATION OF THE FATHER (FEMALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Professional | 43 | 17.6 | 8 | 3.7 | 51 | 11.1 | 13.9 | 20.147* |
| Executive, managerial, official | 28 | 11.4 | 6 | 2.8 | 34 | 7.4 | 8.6 | 11.805* |
| Office and clerical | 10 | 4.1 | 10 | 4.7 | 20 | 4.3 | 0.6 | 0.201 |
| Salesman | 18 | 7.3 | 16 | 7.4 | 34 | 7.4 | 0.1 | 0.472 |
| Small business | 31 | 12.7 | 33 | 15.4 | 64 | 13.9 | 2.7 | 0.564 |
| Agriculture | 23 | 9.4 | 42 | 19.5 | 65 | 14.1 | 10.1 | 8.914* |
| Service | 9 | 3.7 | 2 | 0.9 | 11 | 2.4 | 2.8 | 3.30 |
| Skilled tradesman | 15 | 6.1 | 11 | 5.1 | 26 | 5.7 | 1.0 | 0.154 |
| Foreman, supervisor, inspector | 12 | 4.9 | 3 | 1.4 | 15 | 3.3 | 3.5 | 4.285* |
| Factory worker | 31 | 12.7 | 67 | 31.2 | 98 | 21.2 | 18.5 | 18.067* |
| Operative | - | - | 1 | 0.5 | 1 | 0.2 | 0.5 | - |
| Retired | 2 | 0.8 | 5 | 2.3 | 7 | 1.5 | 1.5 | - |
| Unemployable | 1 | 0.4 | 2 | 0.9 | 3 | 0.7 | 0.5 | - |
| Deceased | 16 | 6.5 | 5 | 2.3 | 21 | 4.6 | 4.2 | - |
| No response | 6 | 2.4 | 4 | 1.9 | 10 | 2.2 | 0.5 | - |
| Total | 245 | 100.0 | 215 | 100.0 | 460 | 100.0 | | |

## Economic Status of the Family

Table 14 summarizes the distribution of the economic status of the family as viewed by the male subjects. It reveals that significantly more of the male college subjects considered their families above average economically than did the male non-college subjects. However, the non-college boys regarded their families as economically average in significantly greater numbers than did the college boys.

Table 15 shows that significantly more of the parents of the college boys than of the non-college boys also considered their families above average economically.

Table 16 depicts the distribution of the economic status of the family as viewed by the female subjects. Significantly more of the college-going girls than their non-college counterparts thought of their families as above average economically.

This information as checked by the parents of the girls is given in Table 17. The parents of the college girls also viewed their families as above average economically in significantly greater numbers than did the parents of the non-college girls.

Therefore, it is seen that both the male and female college-going subjects and their parents considered their families above average economically in significantly greater numbers than did the non-college subjects and their

## TABLE 14

## ECONOMIC STATUS OF THE FAMILY (MALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Considerably above average | 6 | 2.5 | - | - | 6 | 1.9 | 2.5 | 9.631* |
| Somewhat above average | 81 | 33.9 | 10 | 13.7 | 91 | 29.2 | 20.2 | |
| Average | 128 | 53.5 | 55 | 75.3 | 183 | 58.7 | 21.8 | 4.376* |
| Somewhat below average | 18 | 7.6 | 7 | 9.6 | 25 | 8.0 | 2.0 | 0.190 |
| Considerably below average | 2 | 0.8 | 1 | 1.4 | 3 | 0.9 | 0.6 | |
| No response | 4 | 1.7 | - | - | 4 | 1.3 | 1.7 | - |
| Total | 239 | 100.0 | 73 | 100.0 | 312 | 100.0 | | |

## TABLE 15

## ECONOMIC STATUS OF THE FAMILY (PARENTS OF MALES)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Above average | 38 | 15.9 | 3 | 4.1 | 41 | 13.1 | 11.8 | 6.480* |
| Average | 175 | 73.2 | 59 | 80.8 | 234 | 75.0 | 7.6 | 0.379 |
| Below average | 22 | 9.2 | 10 | 13.7 | 32 | 10.3 | 4.5 | 1.645 |
| No response | 4 | 1.7 | 1 | 1.4 | 5 | 1.6 | 0.3 | - |
| Total | 239 | 100.0 | 73 | 100.0 | 312 | 100.0 | | |

# TABLE 16

## ECONOMIC STATUS OF THE FAMILY (FEMALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Considerably above average | 6 | 2.4 | 2 | 0.9 | 8 | 1.7 | 1.5 | 12.508* |
| Somewhat above average | 75 | 30.6 | 33 | 15.3 | 108 | 23.5 | 15.3 | |
| Average | 144 | 58.8 | 155 | 72.1 | 299 | 65.0 | 13.3 | 3.441 |
| Somewhat below average | 18 | 7.4 | 22 | 10.3 | 40 | 8.7 | 2.9 | 0.864 |
| Considerably below average | 2 | 0.8 | - | - | 2 | 0.4 | 0.8 | |
| No response | - | - | 3 | 1.4 | 3 | 0.7 | 1.4 | - |
| Total | 245 | 100.0 | 215 | 100.0 | 460 | 100.0 | | |

## TABLE 17

## ECONOMIC STATUS OF THE FAMILY (PARENTS OF FEMALES)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Above average | 40 | 16.3 | 16 | 7.4 | 56 | 12.2 | 8.9 | 6.948* |
| Average | 179 | 73.1 | 167 | 77.7 | 346 | 75.2 | 4.6 | 0.290 |
| Below average | 25 | 10.2 | 26 | 12.1 | 51 | 11.1 | 1.9 | 0.314 |
| No response | 1 | 0.4 | 6 | 2.8 | 7 | 1.5 | 2.4 | - |
| Total | 245 | 100.0 | 215 | 100.0 | 460 | 100.0 | | |

parents. Only the non-college boys viewed their families as economically average in significantly greater numbers.

Also noted is the fact that the young people and their parents did not agree on the average and above average evaluation of the economic status of the family. Twice as many of the children as their parents stated that their families were above average economically.

## Ability of the Parents to Help Finance a College Education

Another measure indicative of the economic status of the family concerns the ability of the parents to help their children finance a college education. Table 18 shows that the college boys considered their families able to help them finance higher education in significantly greater numbers than did the non-college boys. The non-college males, however, stated that their parents could not help them finance a college education in significantly greater numbers than did the college males.

Table 19 indicates that the non-college girls felt that their families could not assist them in the financing of a college education in significantly larger numbers than did the college girls.

Therefore, it is evident that both the male and female non-college subjects expressed significantly more than did the college subjects the opinion that their families could

## TABLE 16

## ABILITY OF PARENTS TO HELP FINANCE A COLLEGE EDUCATION (MALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Can easily afford it | 52 | 21.8 | 5 | 6.8 | 57 | 18.3 | 15.0 | 6.377* |
| Can afford it, but with much sacrifice | 141 | 59.0 | 31 | 42.5 | 172 | 55.1 | 16.5 | 2.638 |
| Cannot afford it | 38 | 15.9 | 33 | 45.3 | 71 | 22.8 | 29.4 | 19.798* |
| I must work to help support my family | 1 | 0.4 | 2 | 2.7 | 3 | 0.9 | 2.3 | - |
| No response | 7 | 2.9 | 2 | 2.7 | 9 | 2.9 | 0.2 | - |
| Total | 239 | 100.0 | 73 | 100.0 | 312 | 100.0 | | |

## TABLE 19

## ABILITY OF PARENTS TO HELP FINANCE A COLLEGE EDUCATION (FEMALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | $Chi^2$ |
| Can easily afford it | 52 | 21.2 | 34 | 15.8 | 86 | 18.7 | 5.4 | 1.682 |
| Can afford it, but with much sacrifice | 160 | 65.3 | 100. | 46.6 | 260 | 56.5 | 18.7 | 2.066 |
| Cannot afford it | 29 | 11.9 | 62 | 28.8 | 91 | 19.8 | 16.9 | 17.686* |
| I must work to help support my family | 4 | 1.6 | 5 | 2.3 | 9 | 2.0 | 0.7 | - |
| No response | - | - | 14 | 6.5 | 14 | 3.0 | 6.5 | - |
| Total | 245 | 100.0 | 215 | 100.0 | 460 | 100.0 | | |

not afford to help send them to college. Only the male college subjects indicated in significantly greater numbers that their parents could easily help them finance a college education.

## Parental Encouragement Given to Attend College

Table 20 shows the distribution of parental encouragement given to attend college as reported by the male subjects. It indicates that significantly more parents of the college boys than of the non-college boys encouraged college attendance for their sons. In contrast, significantly more parents of the non-college boys than of the college boys did not encourage their sons to seek a college education.

In Table 21 there is summarized the responses of the parents of the male subjects to the question whether or not they had advised their sons to prepare for college while in high school. This was interpreted to mean whether or not they had encouraged them to go to college. This table relates that significantly more parents of the college boys than of the non-college boys had encouraged their sons to go to college. Conversely, significantly more of the parents of the non-college boys had not encouraged college attendance.

Table 22 gives the girls' evaluation of the encouragement their parents had given them to seek higher education. It is seen that the college girls were encouraged by their parents to go to college in significantly larger numbers

## TABLE 20

## PARENTAL ENCOURAGEMENT TO ATTEND COLLEGE (MALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Want me to go to college | 230 | 96.3 | 42 | 57.6 | 272 | 87.2 | 38.7 | 9.890* |
| Do not want me to go | 1 | 0.4 | - | - | 1 | 0.4 | 0.4 | 52.0* |
| Do not care whether I go | 8 | 3.3 | 26 | 35.6 | 34 | 10.9 | 32.3 | |
| Will not let me go | - | - | - | - | - | - | - | |
| Divided on the matter | - | - | 2 | 2.7 | 2 | 0.6 | 2.7 | - |
| No response | - | - | 3 | 4.1 | 3 | 0.9 | 4.1 | - |
| Total | 239 | 100.0 | 73 | 100.0 | 312 | 100.0 | | |

## TABLE 21

## ENCOURAGEMENT TO PREPARE FOR COLLEGE (PARENTS OF MALES)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Yes | 228 | 95.4 | 48 | 65.8 | 276 | 88.5 | 29.6 | 5.815* |
| No | 4 | 1.7 | 11 | 15.1 | 15 | 4.8 | 13.4 | 6.704* |
| No response | 7 | 2.9 | 14 | 19.1 | 21 | 6.7 | 16.2 | - |
| Total | 239 | 100.0 | 73 | 100.0 | 312 | 100.0 | | |

## TABLE 22

## PARENTAL ENCOURAGEMENT TO ATTEND COLLEGE (FEMALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Want me to go to college | 232 | 94.7 | 103 | 47.9 | 335 | 72.8 | 46.8 | 33.698* |
| Do not want me to go | 1 | 0.4 | 17 | 7.9 | 18 | 3.9 | 7.5 | |
| Do not care whether I go | 12 | 4.9 | 83 | 38.7 | 95 | 20.7 | 33.8 | 81.241* |
| Will not let me go | - | - | 1 | 0.4 | 1 | 0.2 | 0.4 | |
| Divided on the matter | - | - | 2 | 0.9 | 2 | 0.4 | 0.9 | - |
| No response | - | - | 9 | 4.2 | 9 | 2.0 | 4.2 | - |
| Total | 245 | 100.0 | 215 | 100.0 | 460 | 100.0 | | |

than were the non-college girls. On the other hand, the non-college girls' parents had not encouraged their daughters to seek a college education in significantly larger numbers than had the parents of the college girls.

Table 23 gives a picture of whether or not the parents indicated they had encouraged their daughters to further their education at the college level. The parents of the college girls stated in significantly greater numbers than did those of the non-college girls that they had encouraged them to attend college. However, the parents of the non-college girls significantly more than those of the college girls had not encouraged their daughters to seek higher education.

In summary, significantly larger numbers of the college-going graduates and their parents indicated that college attendance had been encouraged. In contrast, significantly more non-college boys and girls agreed with their parents in stating that higher education had not been encouraged.

## Parental Influence on Post-High School Plans

Tables 24 and 25 show the distribution of the extent of influence the male and female subjects indicated their parents had on their after-high school plans. There is no significant difference between the college and non-college subjects in any of the categories on either table. It is seen that the parents of both groups had almost the same

## TABLE 23

## ENCOURAGEMENT TO PREPARE FOR COLLEGE (PARENTS OF FEMALES)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Yes | 234 | 95.5 | 139 | 64.7 | 373 | 81.1 | 30.8 | 12.462* |
| No | 9 | 3.7 | 53 | 24.7 | 62 | 13.5 | 21.0 | 37.316* |
| No response | 2 | 0.8 | 23 | 10.6 | 25 | 5.4 | 9.8 | - |
| Total | 245 | 100.0 | 215 | 100.0 | 460 | 100.0 | | |

## TABLE 24

## PARENTAL INFLUENCE ON POST-HIGH SCHOOL PLANS (MALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Not at all | 21 | 8.9 | 7 | 9.6 | 28 | 9.0 | 0.7 | 0.0 |
| Some | 150 | 62.7 | 47 | 64.3 | 197 | 63.1 | 1.6 | 0.029 |
| Very much | 66 | 27.6 | 18 | 24.7 | 84 | 26.9 | 2.9 | 0.263 |
| No response | 2 | 0.8 | 1 | 1.4 | 3 | 1.0 | 0.6 | - |
| Total | 239 | 100.0 | 73 | 100.0 | 312 | 100.0 | | |

## TABLE 25

## PARENTAL INFLUENCE ON POST-HIGH SCHOOL PLANS (FEMALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| Not at all | 25 | 10.2 | 18 | 8.4 | 43 | 9.3 | 1.8 | 0.373 |
| Some | 152 | 62.1 | 146 | 67.9 | 298 | 64.8 | 5.8 | 0.485 |
| Very much | 67 | 27.3 | 51 | 23.7 | 118 | 25.7 | 3.6 | 0.546 |
| No response | 1 | 0.4 | - | - | 1 | 0.2 | 0.4 | - |
| Total | 245 | 100.0 | 215 | 100.0 | 460 | 100.0 | | |

amount of influence on the various levels -- very much, some, or none.

### Opinions on the Value of a College Education

In the student questionnaire each subject was requested to choose from a list of eighteen statements concerning the value of a college education the three that seemed most important to him. The parents were asked to select from a list of thirteen those which came closest to their own opinions. The students' choices are included for purposes of comparison with those of their parents.

The total distribution of the students' and parents' choices are summarized in the Appendix. Selected statements that were chosen with the greatest frequency are presented in tables and discussed in the following sections.

### Opinions of Male Graduates on the Value of a College Education

The items most frequently checked by the college and non-college male subjects were:

| | |
|---|---|
| Item 2: | I (am) would be greatly dissatisfied to stop at my present level of knowledge |
| Item 4: | College graduates get jobs with better pay |
| Item 5: | The country needs more people who have highly developed skills and knowledge |
| Item 9: | A college education helps you live a happier, more complete life |

Item 15: College life broadens you socially, and developes your personality

TABLE 26

SELECTED OPINIONS ON THE VALUE OF A COLLEGE EDUCATION (MALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| Item | N | % | N | % | N | % | % Difference | Chi$^2$ |
| 2 | 102 | 14.1 | 16 | 7.3 | 118 | 12.7 | 6.8 | 6.742* |
| 4 | 116 | 16.1 | 38 | 17.4 | 154 | 16.6 | 1.3 | 0.145 |
| 5 | 93 | 13.3 | 29 | 13.2 | 122 | 13.1 | 0.1 | 0.0 |
| 9 | 81 | 11.2 | 24 | 10.9 | 105 | 11.3 | 0.3 | 0.053 |
| 15 | 82 | 11.4 | 20 | 9.1 | 102 | 11.0 | 2.3 | 0.871 |

Table 26 depicts the items most frequently checked by the college male subjects. Specifically, items 2, 4, 5, 9, and 15, which indicate a positive opinion of the value of college, were each chosen by over twenty-five per cent of the college-going boys. These items reflect the feeling that higher education brings an economic, intellectual, personal, and social improvement of the individual and that our nation needs more people with a college education.

Items chosen with the greatest frequency by the non-college males also indicate favorable opinions of the value of higher education. Numbers 4, 5, 9, and 15 were each checked by one-quarter of these boys who recognized the value of college in terms of economic, personal, and social selfimprovement and of meeting national needs.

In comparing the male college and non-college boys, it is seen that both groups responded to items 4, 5, 9, and 15 with the greatest frequency. The college boys also chose item 2 in significantly larger numbers than did the non-college boys. In analyzing the total number of responses made to each of these items by both groups, it is found that the college boys' responses make up over seventy-five per cent of the total in every case. But, it must be kept in mind that there are more than three times as many college as non-college boys in the study.

The two groups agreed in that they almost completely neglected the following opinions:

Item 6: College is a good place to meet a worthy life-mate

Item 10: Going to college costs more than it is worth

Item 14: Persons who do not have college educations often make better leaders

Item 17: Going to college would be a waste of time for me

## Opinions of Female Graduates on the Value of a College Education

When asked to choose only three statement concerning the value of a college education, the girls indicated a preference for the following opinions:

Item 2: I (am) would be greatly dissatisfied to stop at my present level of knowledge

Item 4: College graduates get jobs with better pay

Item 5: The country needs more people who have highly developed skills and knowledge

Item 9: A college education helps you live a happier, more complete life

Item 15: College life broadens you socially, and developes your personality

TABLE 27

SELECTED OPINIONS ON THE VALUE OF A COLLEGE EDUCATION (FEMALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| Item | N | % | N | % | N | % | % Difference | $\text{Chi}^2$ |
| 2 | 141 | 19.3 | 58 | 9.0 | 199 | 14.4 | 10.3 | 24.728* |
| 4 | 57 | 7.7 | 54 | 8.4 | 111 | 8.0 | 0.7 | 0.143 |
| 5 | 85 | 11.5 | 99 | 15.5 | 184 | 13.3 | 4.0 | 3.689 |
| 9 | 115 | 15.6 | 51 | 7.9 | 166 | 12.0 | 7.7 | 17.630* |
| 15 | 122 | 16.5 | 77 | 12.1 | 199 | 14.4 | 4.4 | 5.167* |

Table 27 shows the opinions most frequently checked by the female subjects. Twenty-five per cent of the college girls selected items 2, 5, 9, and 15. These choices are evidence of positive opinions of the value of higher education as a means by which one can better oneself intellectually, socially, personally, and by which our country's need for well-trained personnel can be met.

The items most frequently chosen by the non-college girls include 2, 4, 5, and 15 which are all positive opinions of the value of a college education. They indicate that even though these girls were not attending college, they viewed it as a way of developing one's personality and intellect, improving one's economic status, and providing our nation with more people of highly developed skills and knowledge.

In contrasting the college and non-college girls, it is seen that both groups checked items 2, 5, and 15 with the greatest frequency. All of these are positive statements concerning the value of a college education. The college girls responded to items 2, 9, and 15 in significantly larger numbers indicating they would be dissatisfied with their present level of education and that the college experience by aiding social and personal development leads to a happier and fuller life.

Few of the college and non-college girls checked the following items:

Item 7: Skilled laborers get paid as much as most college graduates

Item 10: Going to college costs more than it is worth

Item 14: Persons who do not have college educations often make better leaders

### Opinions of Parents of Male Graduates on the Value of a College Education

Table 28 shows the statements most frequently checked by the parents of the male subjects. They were:

Item 2: A college education is worth making the financial sacrifice it requires

Item 4: Persons who do not have a college education are at a social disadvantage in life

Item 7: A college education is required to get good jobs and advance in them

Item 9: People with a college education live more satisfying and interesting lives than those without a college education

Item 11: Too many capable young people who desire to go to college are not able to go

TABLE 28

SELECTED OPINIONS ON THE VALUE OF A COLLEGE EDUCATION (PARENTS OF MALES)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| Item | N | % | N | % | N | % | % Difference | Chi$^2$ |
| 2 | 210 | 24.4 | 36 | 16.4 | 246 | 22.6 | 8.0 | 11.005* |
| 4 | 73 | 8.4 | 12 | 5.5 | 85 | 7.8 | 2.9 | 4.184* |
| 7 | 170 | 19.8 | 42 | 19.1 | 212 | 19.6 | 0.7 | 1.675 |
| 9 | 143 | 16.5 | 23 | 10.5 | 166 | 15.3 | 6.0 | 8.579* |
| 11 | 118 | 13.6 | 44 | 20.1 | 162 | 14.9 | 6.5 | 1.237 |

More than one-quarter of the parents of the college boys responded to items 2, 4, 7, 9, and 11. The first four, which are positive opinions concerning the value of higher education, state that college is a definite asset to the individual in that it helps him better himself vocationally, economically, and personally. Item 11 indicates that there are many capable young people who would like to attend college but for various reasons cannot.

Statements chosen by over twenty-five per cent of the non-college boys' parents, items 2, 7, 9, and 11, are also evidence of favorable opinions of the value of college. In contrasting the choices of the parents of the college and non-college boys, it is seen that with but one exception they regarded college in a somewhat similar manner. They differed on the choice of item 4, which would indicate that the parents of the non-college boys did not feel as strongly as did those of the college boys that a person without a college education is at a social disadvantage in life.

Significantly more of the parents of the college boys checked items 2 and 9 pointing out that they thought a college education is worth making the necessary financial sacrifice and that people who have had this experience lead more satisfying lives.

The parents of both the college and non-college boys did not respond to the following items in large numbers:

Item 5: Going to college costs more than it is worth

Item 6: The school of "hard knocks" is more valuable than a college education

Item 10: Too many young people are going to college

## Opinions of Parents of Female Graduates on the Value of a College Education

As seen in Table 29, the statements most frequently checked by the parents of the female subjects were:

Item 2: A college education is worth making the financial sacrifice it requires

Item 3: Success in life depends upon ability and effort, not amount of education

Item 4: Persons who do not have a college education are at a social disadvantage in life

Item 7: A college education is required to get good jobs and to advance in them

Item 8: You do not need a college education to earn good money and be leaders in your communities

Item 9: People with a college education live more satisfying and interesting lives than those without a college education

Item 11: Too many capable young people who desire to go to college are not able to go

TABLE 29

SELECTED OPINIONS ON THE VALUE OF A COLLEGE EDUCATION (PARENTS OF FEMALES)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| Item | N | % | N | % | N | % | % Difference | $\text{Chi}^2$ |
| 2 | 212 | 24.9 | 97 | 14.9 | 309 | 20.5 | 10.0 | 28.727* |
| 3 | 40 | 4.7 | 75 | 11.5 | 115 | 7.7 | 6.8 | 15.395* |
| 4 | 62 | 7.3 | 16 | 2.5 | 78 | 5.2 | 4.8 | 18.710* |
| 7 | 161 | 18.9 | 90 | 13.9 | 251 | 16.6 | 5.0 | 11.670* |
| 8 | 29 | 3.4 | 49 | 7.5 | 78 | 5.2 | 4.1 | 8.717* |
| 9 | 156 | 18.4 | 54 | 8.3 | 210 | 14.0 | 10.1 | 37.049* |
| 11 | 126 | 14.8 | 114 | 17.6 | 240 | 16.0 | 2.8 | 0.066 |

Over twenty-five per cent of the parents of the college girls checked items 2, 4, 7, 9, and 11. These are the same positive opinions of the value of college most frequently checked by the parents of the college boys. Thus, the parents of the college-going male and female subjects viewed higher education in a similar manner, that is, as a means of bettering oneself vocationally, economically, socially, and personally. Too, they shared the opinion that there are many young men and women who would like to go to college but cannot.

More than one-fourth of the parents of the non-college girls selected items 2, 3, 7, 8, 9, and 11. These are the same as were chosen by the parents of the non-college boys but with two additions, items 3 and 8. These last two state that success in life depends more upon ability and effort than education and that one does not need to attend college to have a satisfactory income and become a civic leader.

In comparing the statements checked most frequently by the parents of the college and non-college girls, it is seen that both groups agreed on items 2, 7, 9, and 11. Of these, items 2, 7, and 9 were selected in significantly greater numbers by the parents of the college girls than those of the non-college girls. This would indicate that those parents whose daughters were enrolled in college held stronger opinions as to the financial benefits of this type of education which they felt necessary in order to obtain good jobs, advance in them, and lead more satisfying lives.

The parents of the college girls also checked item 4 significantly more than did those of the non-college girls indicating they thought a person is at a social disadvantage without a college education. Items 3 and 8, which are essentially negative opinions of the value of college, were selected by significantly more of the parents of the non-college girls pointing out that they considered success in life as not dependent upon education in that one does not have to attend college to earn an adequate living and become a leader.

Item 11, which was marked by over twenty-five per cent of both groups of parents, indicates their agreement on the fact that many young people who could profit from college are unable to attend.

Item 10 that expresses the opinion that too many young people are going to college was the least frequently checked.

## Summary and Results

In summarizing the findings of this chapter, only those factors -- except the opinions on the value of a college education -- in which there were found significant differences between the college and non-college subjects are considered.

Concerning the role of the parents' education, it was noted that there was a relationship between the fact that the parents had graduated from college and their children enrolled in degree granting schools. Conversely, talented graduates whose parents had not attended high school were prone not to seek higher education. In addition, college girls had more fathers who either had graduated from high school or held advanced degrees and more mothers who had attended college. More non-college boys' fathers had attended but not graduated from high school, and more non-college girls stated their mothers had done likewise.

The occupation of the father was also related to the educational decisions of the subjects. It was seen that those whose fathers held executive, managerial, or official positions favored entering college, while those whose fathers were engaged in agriculture or factory work did not. There was, furthermore, evidence of more college attendance among the sons of salesmen and the daughters of professional and supervisory men.

When asked to indicate the economic status of the family, the college subjects and their parents tended to evaluate it as above average. Also, more of the college boys than of the non-college boys stated their parents were able to help them finance a college education. The non-college boys more than any other group stated that their families were of average economic standing. However, both the boys and girls who were not college-going agreed in greater numbers than did their college fellow-graduates that they could not expect their families to give financial assistance for their higher education.

The subjects and their parents concurred in their reports on parental encouragement given to attend college. A relationship between parental encouragement and actual college enrollment was found to exist.

When asked to estimate parental influence on post-high school plans, the college and non-college subjects showed almost no difference on the various levels -- much, some, or no influence.

The summary of the opinions concerning the value of a college education does not lend itself to discussion in terms of significant differences between the two groups. The opinions that were held by at least one-fourth of the subjects and their parents are considered in the following paragraphs.

Both the college and non-college graduates indicated that college affords personal and social development of the individual while providing our country with needed trained personnel. Furthermore, all but the college girls pointed out the economic advantages of a college education. Only the non-college boys did not place a high value on the intellectual side of the degree-seeking experience.

The parents agreed that college provides vocational, economic, and personal advantages for the individual, thus making it worth the necessary financial sacrifice. All thought there were many capable and interested young people who for some reason were not pursuing higher education.

The parents whose children were enrolled in degree granting institutions felt this would give their children social advantages and lead to more satisfying lives. Although the parents of the non-college boys accepted this last value, those of the non-college girls indicated they felt a college education is not essential to an adequate income, civic leadership or success in life.

Comparison of the parents' and children's opinions is difficult due to the fact that each group was limited to a separate list of statements with few direct parallels. Nevertheless, it can be said that in general both the graduates and their parents expressed positive opinions of the value of a college education. The college girls and their parents agreed that this experience helps one live a more satisfying and happier life. But, the non-college girls and their parents agreed that success in life depends upon ability and effort, not education, and that learning on a job is more practical than most school learning. Generally, both the parents and their children felt that college provides economic and social advantages, and all concurred that higher education benefits the individual in terms of personal development.

In the following chapter the scholastically talented graduates are described according to the stability of their general plans for the fall of 1957. In addition, the stability of their plans is compared to that of the non-scholastically talented graduates in the sample.

# CHAPTER VII

# GENERAL PLANS OF THE TALENTED GRADUATES FOR THE FALL OF 1957

An analysis of the random sample used in this study reveals that approximately fifteen per cent of Wisconsin's 1957 high school graduates ranked in the top one-fourth of their graduating classes both in a psychological test and in scholastic achievement as measured by grades earned in high school courses. In this group there were about six girls for every five boys.

In this chapter the 772 scholastically talented subjects of this study are described in terms of the stability of their after-high school plans. In addition, they are contrasted to a group of high school graduates of 1957 who were also ranked into quarters according to both class percentile rank and Henmon-Nelson Test percentile rank but did not qualify as subjects of this investigation. This information was obtained from data furnished by the high schools and from a follow-up questionnaire to the parents in which the graduates' post-high school activities were verified.

It is seen that a majority of both the boys and girls of the academically talented group planned to enter and did enter degree granting institutions after completing high school. However, many of them chose to enroll in non-degree schools or to seek permanent employment in the labor market immediately upon receiving their diplomas. As might be expected, some of the boys entered the military service, and a few of the girls were married and became homemakers.

Two questions might be posed concerning the post-high school plans of these academically gifted youths. First, how stable are their plans? That is, do they carry out their plans expressed during the spring of their senior year in high school? Secondly, does the stability of the after-high school plans of these superior youths differ from that of other graduates?

## Stability of Plans of the Scholastically Talented Subjects

Tables 30 and 31 reveal the distribution of the scholastically talented subjects of this study according to their original plan and what they did in the fall of 1957.

### Plans to Enter Degree Granting Schools

There were 312 academically gifted male graduates of which while seniors in high school 239 (76.6%) had planned to enter degree granting institutions. Of this group, 223 (93.3%) enrolled in such schools. Out of the remaining sixteen subjects who failed to carry through with their

2.

## TABLE 30

### DISTRIBUTION OF SCHOLASTICALLY TALENTED MALE SUBJECTS ACCORDING TO ORIGINAL PLAN AND WHAT THEY ACTUALLY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Military Service | | Other[b] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 239 | 76.6 | 223[c] | 93.3[d] | 2 | 0.8 | 11 | 4.6 | 3 | 1.3 | - | - | 100.0 |
| Non-degree school | 13 | 4.2 | 6 | 46.1 | 4 | 30.8 | 3 | 23.1 | - | - | - | - | 100.0 |
| Job[a] | 25 | 8.0 | 3 | 12.0 | - | - | 20 | 80.0 | 2 | 8.0 | - | - | 100.0 |
| Military service | 23 | 7.4 | 1 | 4.4 | - | - | 5 | 21.7 | 17 | 73.9 | - | - | 100.0 |
| No plans | 12 | 3.8 | 6 | 50.0 | - | - | 5 | 41.7 | - | - | 1 | 8.3 | 100.0 |
| Total | 312 | 100.0 | 239 | 76.6 | 6 | 1.9 | 44 | 14.1 | 22 | 7.1 | 1 | 0.3 | 100.0 |

[a] Includes working at home and apprentice

[b] Includes unemployed

[c] Numbers summed in vertical columns

[d] Percentages summed in horizontal columns

3/

## TABLE 31

## DISTRIBUTION OF SCHOLASTICALLY TALENTED FEMALE SUBJECTS ACCORDING TO ORIGINAL PLAN AND WHAT THEY ACTUALLY DID IN FALL OF 1957

| | Original Plans | | Degree School | | Non-degree School | | Job | | Marriage | | Other[c] | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | % |
| Degree school | 255 | 55.4 | 236[d] | 92.5[e] | 5 | 2.0 | 11 | 4.3 | 2 | 0.8 | 1 | 0.4 | 100.0 |
| Non-degree school | 87 | 18.9 | 9 | 10.3 | 65 | 74.7 | 12 | 13.8 | 1 | 1.2 | - | - | 100.0 |
| Job[a] | 110 | 23.9 | - | - | 1 | 0.9 | 100 | 90.9 | 7 | 6.4 | 2 | 1.8 | 100.0 |
| Marriage | 3 | 0.7 | - | - | - | - | - | - | 3 | 100.0 | - | - | 100.0 |
| No plans[b] | 5 | 1.1 | - | - | 1 | 20.0 | 2 | 40.0 | 1 | 20.0 | 1 | 20.0 | 100.0 |
| Total | 460 | 100.0 | 245 | 53.3 | 72 | 15.6 | 125 | 27.2 | 14 | 3.0 | 4 | 0.9 | 100.0 |

a. Includes working at home
b. Includes military service
c. Includes unemployed and military service
d. Numbers summed in vertical columns
e. Percentages summed in horizontal columns

original plans, the majority took jobs, while others either enrolled in non-degree schools or entered the military service. Thus, for these scholastically talented boys there is a high degree of agreement between their original college plans and what they did.

There were 460 academically superior female graduates of whom 255 (55.4%) had originally planned to enter degree granting institutions while seniors in high school. Of this group, 236 (92.5%) did so. The nineteen girls who did not realize their intended plans took jobs, entered other types of schools, were married and engaged in homemaking, or unemployed.

Therefore, as with the boys, the college plans of the girls subjects reveal a high degree of agreement between the original plan and its fruition. Their college-going intentions were realized to an almost equal degree as those of the boys. A like number of girls and boys who did not carry out their intended plans sought employment. However, slightly more girls than boys shifted to non-degree schools.

It is of interest to note that a nation-wide study using mental ability as a criterion found that of the upper thirty per cent of boys, sixty-eight per cent mid-way in their senior year planned to attend college. Of these, seventy-nine per cent enrolled. Of their female counterparts, fifty-six per cent planned on college, and of these, seventy-six per cent carried out their plans.

The stability of college plans of the scholastically talented subjects of the present study is considerably higher by some fourteen per cent for the boys and seventeen per cent for the girls. However, it must be remembered that the latter was a much more select group who revealed their college plans later in the school year, approximately two months before graduation from high school (25).

## Plans to Enter Non-Degree Granting Schools

Figures in the tables show that thirteen of the boys had originally planned to enroll in non-degree schools. Only four realized their plans, while almost half changed their minds and decided to enter degree granting institutions. The remaining three obtained work. Although only relatively few of the boys intended to enter non-degree schools, it is evident that the stability of their plans does not approximate that of their college-planning counterparts.

For the girls, eighty-seven (18.9%) had originally planned to attend non-degree schools of whom sixty-five (74.7%) followed through with their plans. Of the twenty-two who did not, twelve went directly to work, nine enrolled in degree schools, and one became a housewife. These figures indicate a relatively high degree of stability in the girls' non-degree school plans.

In comparing the non-degree school plans of these talented youth, it is apparent that those of the girls are considerably more stable than those of the boys. The girls seem to have abided by their original plans, whereas the boys changed their minds mainly in favor of entering degree granting schools. Also, a slightly higher proportion of the boys than the girls took jobs.

## Plans to Work

Twenty-five of the high ranking boys planned to seek permanent employment immediately after completing high school. Twenty realised their plans, while of the others three enrolled in college and two enlisted in the armed forces. Thus, although the number of work-planning boys is small, there is a high degree of realisation of plans.

As contrasted to the boys, considerably more of the high ability girls sought employment after completing high school. Of the 110 (23.9%) work-planning girls, 100 (90.9%) were working in the fall. Seven had decided upon marriage, two were unemployed, and one had enrolled in a non-degree school. These figures depict a very high agreement between the intended plans and the carrying-out of the plans among the girls intending to seek permanent employment. Interesting is the fact that none changed their minds in favor of entering college and that seven of them decided to get married. Thus, here again the girls show a more stable pattern than do the boys.

## Military Service and Marriage

The military service had beckoned to twenty-three of the boys in their planning. Of these, seventeen entered the service, while of those who changed their minds, five took jobs and one entered college. Thus, most of the boys who planned on entering the armed forces did so, and those who changed their minds mainly took jobs.

Interestingly, only three girls were planning to be married after graduation from high school. All three abided by their plans, for their parents reported they were housewives.

## No Definite Plans

Only twelve of the top-ranking boys did not express any definite plans beyond the secondary school. Of this number, six decided during the course of the summer to enter college. Five others took jobs and one remained unemployed.

Fewer girls than boys had not formulated definite plans before completing high school. Of the five who had not done so, two took jobs, and one each was married, entered a non-degree school, and was unemployed.

## Stability of Plans of the Non-Scholastically Talented Graduates*

The response from the follow-up questionnaire of the parents of the non-scholastically talented graduates was approximately fifty per cent with the parents of the female subjects returning a few more than those of the male. These questionnaires were treated similarly to those of the top-ranking graduates (see Chapter V) and were also tabulated by quarters -- first, according to class percentile rank and, then, by Henmon-Nelson Test percentile rank. Detailed tables of these findings are included in the Appendix.

For both the male and female non-scholastically talented subjects who had originally planned to enter degree granting schools there is a high degree of stability of plans. This ranges in the various quarters from seventy-four to ninety-three per cent. Generally speaking, the higher the scholastic achievement and test performance the greater the degree of stability of college-going plans. In contrasting this group with the scholastically talented graduates, it is seen that the talented carried through with their college plans to a higher degree than did their non-talented classmates.

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*Refers to the graduates in the random sample whose parents responded to the follow-up questionnaire and who did not qualify as scholastically talented graduates as defined for purposes of this study.

On the whole, the non-scholastically talented boys showed a higher degree of carry-through of their non-degree school plans than did the talented boys. The realization of the non-talented girls' plans to attend this type of school compared favorably with that of the talented girls. It is interesting that both the talented and non-talented girls evidenced a higher degree of follow-through in their non-degree school plans than did the boys in these two groups.

In regard to plans to seek employment, the talented male and female subjects showed a slightly higher degree of persistency than did the non-talented. Once again the girls showed more determination in following through with their intentions than did the boys.

The boys of both the talented and the non-talented groups carried out their plans for military service to about the same degree with slightly more of the talented realizing their original intentions.

Of the sixteen girls of both the talented and non-talented groups who originally planned to be married, fifteen did so.

## Summary and Results

Of the 772 scholastically talented subjects, 494 (64.0%) had originally planned to enter degree granting institutions approximately two months prior to graduation from high school. Of this number, 459 (92.9%) did enroll in college. Thus, there is a high degree of stability between the college-going plans of these gifted graduates and their realization.

Because some of the graduates who had not previously planned on attending college changed their minds in favor of it during the summer, there were 484 (62.7%) of the 772 academically superior students who entered college in the fall of 1957. Therefore, there were only ten fewer who enrolled in degree granting institutions than who had planned.

Analyses of the figures for males and females separately show a discrepancy in those who had originally planned on college. Of the 312 male subjects, 239 (76.6%) planned to enter college and of these, 223 (93.3%) enrolled. But of the 460 female subjects, only 255 (55.4%) were planning to attend degree granting schools and of this number, 236 (92.5%) did so. Although the sexes evidenced an almost equal determination in carrying out their plans, a greater percentage of the males had originally planned on college.

Since some of the subjects changed their minds in favor of college, there were 239 (76.6%) of the males and 245 (53.3%) of the females who ultimately enrolled in degree granting schools in the fall of 1957.

It is of interest to note that there were 239 males who originally planned on college and after the various shifts in plans there were still 239 who enrolled. But, for the girls these shifts in plans decreased the number who entered college by ten. The college enrollees, therefore, included 239 boys and 245 girls, a much more even ratio than the original group of 312 boys and 460 girls. This bears out the importance of reporting the facts for the males and females separately and of not combining them.

Concerning the stability of the after-high school plans of the talented graduates who did not choose to enter degree schools, an interesting fact is observed. The girls demonstrated somewhat more persistency in following through with their plans to enter non-degree schools and to seek employment. Also, although there were more girls in the study group, there were fewer girls than boys who failed to state any post-high school plans.

In contrasting the stability of the college-going plans of the non-scholastically talented with the talented, it is found that the talented followed through with their plans to a higher degree. This difference becomes more apparent as one approaches the lower quarters in both class rank and Henmon-Nelson Test rank.

The talented graduates also carried through with their original work, military, and marriage plans to a higher degree than did the non-scholastically talented graduates. Female subjects in this latter group compared almost equally with their talented counterparts in following their plans to enter non-degree schools.

The next chapter describes the scholastically talented graduates in terms of the specific activities they were engaged in the fall after graduation from high school.

# CHAPTER VIII

# SPECIFIC ACTIVITIES OF THE TALENTED GRADUATES IN THE FALL OF 1957

This chapter presents a detailed account of what the scholastically talented graduates did in the fall of 1957. The schools in which the majority of them enrolled are described by type and location -- in or outside of the state of Wisconsin. The activities engaged in by those graduates who did not choose to continue their education are related. In addition, there is summarized what the subjects identified as possessing high potential in some area were doing.

## Degree Granting Institutions Attended by the Subjects

There are 312 scholastically talented male graduates in this investigation; 239 (76.6%) of them enrolled in degree granting institutions in the fall of 1957. Of the 460 women graduates in this study, 245 (53.3%) entered similar schools. Thus, proportionately more boys than girls elected to continue their education in institutions of higher learning after graduating from high school.

An analysis of Table 32 reveals that of the 239 boys entering college 184 (77.0%) sought degrees within the state of Wisconsin and 55 (23.0%) traveled to other states in quest of advanced education.

### TABLE 32

### DEGREE GRANTING INSTITUTIONS ATTENDED BY THE SCHOLASTICALLY TALENTED SUBJECTS IN THE FALL OF 1957

| | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Public university | | | | | | |
| in Wisconsin | 93 | 38.9 | 77 | 31.5 | 170 | 35.1 |
| outside Wisconsin | 14 | 5.9 | 8 | 3.3 | 22 | 4.5 |
| State college | | | | | | |
| in Wisconsin | 47 | 19.7 | 66 | 26.9 | 113 | 23.3 |
| outside Wisconsin | 6 | 2.5 | 3 | 1.1 | 9 | 1.9 |
| Liberal arts | | | | | | |
| in Wisconsin | 14 | 5.9 | 26 | 10.7 | 40 | 8.3 |
| outside Wisconsin | 22 | 9.2 | 32 | 13.1 | 54 | 11.2 |
| Private university | | | | | | |
| in Wisconsin | 23 | 9.6 | 18 | 7.3 | 41 | 8.5 |
| outside Wisconsin | 12 | 5.0 | 12 | 4.9 | 24 | 5.0 |
| Seminary in Wisconsin | 3 | 1.3 | - | - | 3 | 0.6 |
| Milwaukee School of Engineering | 2 | 0.8 | - | - | 2 | 0.4 |
| U.S. Naval Academy | 1 | 0.4 | - | - | 1 | 0.2 |
| Part-time only in Wisconsin | 2 | 0.8 | - | - | 2 | 0.4 |
| Private teachers outside Wisconsin | - | - | 2 | 0.8 | 2 | 0.4 |
| Religious outside Wisconsin | - | - | 1 | 0.4 | 1 | 0.2 |
| Total | 239 | 100.0 | 245 | 100.0 | 484 | 100.0 |

This same table shows that of the 239 boys, 163 (68.2%)

attended public colleges -- 142 in Wisconsin and twenty-one out-of-state. There were seventy-six (31.8%) who enrolled in private colleges -- forty-two within the state, thirty-four outside of Wisconsin. It is interesting to note that of the 239 boys enrolling in college, 142 (59.4%) chose to do so in publicly supported schools in their home state.

For the 245 girls who sought higher learning, 187 (76.3%) did so within the borders of Wisconsin, while 58 (23.7%) entered colleges in other states. Of these 245, there were 154 (62.9%) enrolled in public colleges -- 143 in Wisconsin and eleven out-of-state. Of the ninety-one (37.1%) who enrolled in private schools, fifty-four did so in Wisconsin and thirty-seven in other states. Again, it is noteworthy that of all the college-going girls, 58.4 per cent elected to enter Wisconsin tax-supported schools.

Thus, it is seen that although proportionately more of the boys chose to enter institutions of higher learning, almost exactly the same number of the sexes enrolled in colleges within their home state and outside the state. Also, there is an almost equal number of boys and girls who attended public and private institutions.

## Non-Degree Granting Institutions Attended By the Subjects

Table 33 shows that as compared to the girls very few of the boys enrolled in non-degree granting schools.

There were but six boys who entered schools other than

## TABLE 33

## NON-DEGREE GRANTING INSTITUTIONS ATTENDED BY THE SCHOLASTICALLY TALENTED SUBJECTS IN THE FALL OF 1957

| | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Trade or institutes | | | | | | |
| in Wisconsin | 2 | 33.2 | 3 | 4.2 | 5 | 6.4 |
| outside Wisconsin | - | - | 1 | 1.4 | 1 | 1.3 |
| Business | | | | | | |
| in Wisconsin | 1 | 16.7 | 13 | 18.1 | 14 | 17.8 |
| Vocational | | | | | | |
| in Wisconsin | 1 | 16.7 | 1 | 1.4 | 2 | 2.6 |
| Farm Short Course | | | | | | |
| in Wisconsin | 1 | 16.7 | - | - | 1 | 1.3 |
| Correspondence | | | | | | |
| in Wisconsin | 1 | 16.7 | - | - | 1 | 1.3 |
| County teachers college in Wisconsin | - | - | 5 | 6.9 | 5 | 6.4 |
| Nursing | | | | | | |
| in Wisconsin | - | - | 32 | 44.3 | 32 | 41.0 |
| outside Wisconsin | - | - | 9 | 12.5 | 9 | 11.5 |
| X-ray technology | | | | | | |
| in Wisconsin | - | - | 3 | 4.2 | 3 | 3.9 |
| outside Wisconsin | - | - | 1 | 1.4 | 1 | 1.3 |
| Fine arts | | | | | | |
| in Wisconsin | - | - | 1 | 1.4 | 1 | 1.3 |
| outside Wisconsin | - | - | 1 | 1.4 | 1 | 1.3 |
| Beauty culture | | | | | | |
| in Wisconsin | - | - | 1 | 1.4 | 1 | 1.3 |
| outside Wisconsin | - | - | 1 | 1.4 | 1 | 1.3 |
| Total | 6 | 100.0 | 72 | 100.0 | 78 | 100.0 |

colleges in contrast to seventy-two girls. These boys mainly chose some type of trade school, all within the state of Wisconsin. In considering this disproportion, it must be remembered that girls with this type of education have many more opportunities predominantly open to them. Among these are rural teaching, nursing, office work, medical technology, and beauty culture. Of the seventy-two girls seeking training in non-degree schools, forty-one (56.8%) entered nurse's training, thirteen enrolled in business courses, five attended county normal schools, and the remaining sought various other types of training. The majority of these girls enrolled in Wisconsin schools. It is thus seen that many more of the girls entered non-degree schools than did their male counterparts.

## Activities of the Subjects Who Did Not Continue Their Education

Table 34 presents a résumé of the activities of the talented youths who did not choose to enter any type of school upon graduating from high school.

The remaining sixty-seven boys were engaged in three different types of activities. Of these, forty-four (65.7%) had jobs, twenty-two had entered the military service, and one was unemployed.

There were 143 girls remaining who were engaged in five different endeavors. Of these, 124 (86.7%) were employed, fourteen had married, three were unemployed, one was working at home, and one had entered the women's branch of the military service.

## TABLE 34

## ACTIVITIES ENGAGED IN BY THE SCHOLASTICALLY TALENTED SUBJECTS WHO DID NOT CHOOSE TO ATTEND SCHOOL IN THE FALL OF 1957

| | Male | | Female | | Total | |
|---|---|---|---|---|---|---|
| | N | % | N | % | N | % |
| Job | 44 | 65.7 | 124 | 86.7 | 168 | 80.0 |
| Military service | 22 | 32.8 | 1 | 0.7 | 23 | 10.9 |
| Unemployed | 1 | 1.5 | 3 | 2.1 | 4 | 1.9 |
| Married and homemaker | - | - | 14 | 9.8 | 14 | 6.7 |
| Working at home | - | - | 1 | 0.7 | 1 | 0.5 |
| Total | 67 | 100.0 | 143 | 100.0 | 210 | 100.0 |

This last table also shows that the girls had entered the labor market at almost three times the rate of the boys. Interestingly, only fourteen had married and settled into the routine of "keeping house."

Of the boys, twelve who had entered the armed forces added that they were going to school after terminating their military service. Seventeen boys who took jobs were planning to continue their education, for their parents stated that it was their sons' intentions to enter school the second semester or the following year.

### Activities of the Subjects Identified as Outstanding

Of the 312 boys, 126 were identified by their high school teachers or counselors as having high potential in some area. One hundred and two (81.0%) of these continued their education in degree granting institutions. Among the others, fifteen accepted jobs, six entered the military service, and three enrolled in non-degree schools.

From among the 460 girls, there were 141 so identified; ninety-four (66.7%) enrolled in degree schools. Of those remaining, twenty-eight found jobs, sixteen enrolled in non-degree schools, two were housewives, and one was unemployed.

## Summary and Results

It is seen in this chapter that approximately three-fourths of the boys and girls who are scholastically talented had decided to continue their education beyond high school. Most of these entered degree granting schools with proportionately more of the boys than of the girls enrolling. Almost the same number of boys and girls sought schooling in and outside of their home state, in private and in public schools.

Many more of the girls entered non-degree schools. This is probably due to the fact that there are more opportunities open to girls with this type of training.

Of the proportionately few graduates who did not seek additional education beyond high school, the majority took jobs. Many of the boys entered the military service, and some of the girls were married and became homemakers.

Among the subjects identified as outstanding students, over three-fourths entered degree granting institutions. The remaining sought work or enrolled in non-degree schools.

The last chapter summarizes the investigation and its findings concerning the influence of parental background factors on the educational decisions of scholastically talented youth. The studies regarding the related problems are also reviewed. Recommendations and implications for education are offered.

# CHAPTER IX

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The primary purpose of this investigation was to determine whether there are important differences in selected parental background factors between scholastically talented high school graduates who continue their education in degree granting institutions and those who do not. There were two related problems, namely, (1) to determine the amount of stability of the post-high school plans of these scholastically talented youth and (2) to report on the specific activities in which they were engaged in the fall of 1957.

This study used the data obtained by a state-wide survey made in the spring of 1957 of approximately 35,000 Wisconsin high school seniors who answered a questionnaire concerning their plans beyond high school and their family background. A sample of about 5,500 of these seniors was selected for special analysis. In the fall a survey of their parents determined what they were doing and furnished additional family background information. From this sample, 772 or ninety-seven per cent of the graduates who ranked between the 75-99 percentiles both in their class rank and on the

Henmon-Nelson Test of Mental Ability were selected for study.

Parents' questionnaires were matched with those completed by their children separated according to sex. They were further sub-divided into two groups: graduates enrolled in degree granting institutions and those who did not enter such institutions. Differences between the college-going and the non-college-going groups were determined concerning the nature of parental influence upon post-high school educational decisions. The following parental background factors were considered:

1. highest level of education attained by the parents
2. occupation of the father
3. economic status of the family
4. parental encouragement to attend college
5. amount of influence the parents had on their children's post-high school plans as evaluated by the seniors
6. parental opinions concerning the value of a college education and the comparison of these opinions with those of the children

In addition, answers were sought to the following related questions:

1. What was the degree of stability of the general after-high school plans of these scholastically talented graduates?
2. What were the specific activities engaged in by each of these graduates in the fall of 1957?

## Conclusions Based on the Findings

The significant differences in the selected parental background factors between the scholastically talented high school graduates who enrolled in degree granting institutions and those who did not are as follows:

### Highest Level of Education Attained by the Father

1. More fathers of the non-college-going boys than those of the college boys did not attend high school or attended but did not graduate.
2. More fathers of the college-going boys than those of the non-college boys graduated from college.
3. More fathers of the non-college-going girls than those of the college girls did not attend high school.
4. More fathers of the college-going girls than those of the non-college girls graduated from high school, from college, or earned higher degrees.

### Highest Level of Education Attained by the Mother

5. More mothers of the non-college boys than those of the college boys did not attend high school.
6. More mothers of the college-going boys than those of the non-college boys graduated from college.
7. More mothers of the non-college girls than those of the college girls did not attend high school or attended but did not graduate.
8. More mothers of the college-going girls than those of the non-college girls both attended and graduated from college.

## Occupation of the Father

9. More fathers of the college-going boys than those of the non-college boys held executive, managerial, official, and sales positions.

10. More fathers of the college-going girls than those of the non-college girls held professional, executive, managerial, official, and supervisory positions.

11. More fathers of the non-college boys and girls than those of the college boys and girls were engaged in agriculture and factory work.

## Economic Status of the Family

12. More college-going boys and girls together with their parents than non-college subjects and their parents considered their families as economically above average compared to other families in their communities.

13. More non-college boys than college boys considered their families as economically average compared to other families in their communities.

## Ability of Parents to Help Finance a College Education

14. More college-going boys than non-college boys considered their families able to help them finance higher education.

15. More non-college boys and girls than college boys and girls indicated that their families could not help them finance college.

## Parental Encouragement Given to Attend College

✓ 16. More college-going boys and girls than non-college boys and girls reported their parents had encouraged them to seek a college education.

17. More parents of college-going boys and girls than those of non-college boys and girls stated they had encouraged their children to prepare for college while in high school.

✓ 18. More non-college boys and girls than college boys and girls reported their parents did not encourage them to seek a college education.

19. More parents of non-college boys and girls than those of college-going boys and girls stated they did not encourage their children to prepare for college while in high school.

## Parental Influence on Post-High School Plans

20. There were no differences between either the male or female college-going or non-college subjects concerning the amount of influence they stated their parents had on their after-high school plans.

## Opinions of the Parents on the Value of a College Education

The parents checked from a list of thirteen statements concerning the value of a college education those which best expressed their own opinions. Statements which were chosen by over twenty-five per cent of the parents and which showed significant differences between the parents of the college-going and those of the non-college-going graduates are as follows:

✓ 21. More parents of college-going boys and girls than those of non-college boys and girls indicated that:

- ✓ a. a college education is worth making the financial sacrifice it requires
- ✓ b. persons who do not have a college education are at a social disadvantage in life
- ✓ c. a college education makes for a more satisfying and interesting life

22. More parents of college-going girls than those of non-college girls thought that a college education is required to get good jobs and to advance in them.

✓ 23. More parents of non-college girls than those of college girls considered that a college education is not needed to earn good money and be civic leaders and that success in life depends upon ability and effort, not amount of education.

## Comparison of Parents' and Children's Opinions on the Value of a College Education

24. In general, all the parents and their children indicated positive opinions on the value of a college education and agreed that higher education provides the opportunity for the personal development of the individual.

25. The college-going girls and their parents agreed that a college education helps one lead a happier and more satisfying life.

26. The non-college girls and their parents concurred that learning on a job is more practical than most school learning and that success in life depends upon ability and effort, not amount of education.

## Stability of General Plans of the Graduates

There is a high degree of stability between the various plans which the scholastically talented subjects expressed in April and May of their senior year in high school and the realization of these plans.

✓ 27. Of the 312 male subjects, 239 (76.6%) planned to enter college, and of these, 223 (93.3%) enrolled.

✓ 28. Of the 460 female subjects, 255 (55.4%) planned to enter college, and of these, 236 (92.5%) enrolled.

29. Due to the fact that some of the subjects shifted their plans, there were 245 (53.3%) girls who entered college in the fall; however, for the boys these shifts in plans had no final effect -- 239 (76.6%) planned to enroll and this same number enrolled.

30. Although there were relatively few boys who planned to work or enter the military service, there was a high degree of stability of their plans -- eighty per cent carried out their work plans and seventy-four per cent their military plans.

31. The girls showed a high degree of stability in their plans to enroll in non-degree schools (74.7%) and seek employment (90.9%).

## Specific Activities of the Graduates in the Fall of 1957

✓ 32. Of the 772 scholastically talented graduates, 484 (62.7%) enrolled in degree granting institutions -- divided almost equally between boys and girls.

33. Of the 239 college-going boys, 163 (68.2%)

enrolled in public schools and seventy-six (31.8%) in private schools; fifty-five (23.0%) went out of the state, while 184 (77.0%) stayed in Wisconsin. Of the 239 boys enrolled in college, 142 (59.4%) were attending Wisconsin state-supported schools.

34. Of the 245 college-going girls, 154 (62.9%) enrolled in public schools and ninety-one (37.1%) in private schools; fifty-eight (23.7%) went out-of-state, while 187 (76.3%) stayed in Wisconsin. Of the 245 college-going girls, 143 (59.4%) were enrolled in Wisconsin tax-supported schools.

35. Only six of the scholastically talented boys entered non-degree granting schools, while seventy-two of the girls entered such schools -- forty-one in nursing, thirteen in business training, and the remaining in other types of schools.

36. Of the sixty-seven boys who did not choose to continue their education, forty-four took jobs, twenty-two entered the military service, and one was unemployed.

37. Of the 143 girls who did not continue their education, 124 took jobs, fourteen were married, three were unemployed, and one each entered the military service and was working at home.

## Recommendations

In order to develop and utilize fully the potential of our high-ranking high school graduates, it is imperative that those charged with the responsibility of their guidance and educational planning recognize the influence of parental background factors on their post-high school educational decisions.

The findings of this study give increased importance to certain aspects of the guidance of youth. The following proposals are offered to assist school personnel who have a role in the education of scholastically talented youth:

> Every school should organize and maintain an adequate cumulative record on every child from the time he enters school.
>
> This record should follow the student through his school career — grade to grade and school to school — and include basic information about his family, such as education of parents, occupation of father, number and ages of siblings, and other pertinent information concerning the home background. In addition, it should contain complete data on parental conferences and questionnaires and surveys completed by the parents.

> High school teachers, advisers, guidance personnel, and administrators should give special attention to those children whose parents have limited educational backgrounds or are of low economic status.
>
> Starting at the eighth grade level there should be a continuous program of individual and group conferences with both the children and their parents so as to acquaint them with the opportunities offered through college to develop the highest potential in every individual and the need to prepare for this type of education while in high school.

> High school boards of education and administrators should provide personnel to administer the entire program of financial aids and scholarships.
>
> Those charged with this responsibility should have the necessary training and adequate school time to properly inform the faculty, students, and parents of available aids and to help worthy and needy students obtain financial assistance for college. Also to be included in this program is information concerning the possibilities and limitations of economic "self-help" while attending college.

> Colleges, private organizations, and the state and federal governments should make every effort to inform the high schools, potential college enrollees, and parents of available financial aids and scholarships.

As a first step, it is suggested that comprehensive studies be made by these agencies of the need for financial assistance and the means by which this need can best be met. Secondly, there should follow a re-evaluation of the present system of awarding scholarships based upon research and past experience.

College student personnel services should obtain and utilize information concerning parental background factors which might be influential on the college careers of their students.

In addition to the usual transcript, application blank, and recommendation the college should secure the cooperation of the high school in obtaining the complete cumulative record on each enrollee and channel it to the adviser and personnel workers who are in closest contact with the student. This would be of special value in counseling with the student regarding poor adjustment and academic achievement, potential drop-out, vocational and educational planning.

To assist in the planning of state-wide programs of higher education, the following are offered:

A survey of the post-high school plans of Wisconsin high school seniors taken in April and May of the senior year will furnish a reliable index of:

a. the college enrollment in the fall of those seniors who rank in the top quartile in both class rank and a psychological test (over 92%). This index is considerably higher than that indicated by a recent nationwide survey (79%) of high ability high school graduates.

b. the employment and military service of these high-ranking boys (80% and 73% respectively).

c. the employment and non-degree school enrollment of the high-ranking girls (over 90% and 74% respectively).

d. the college enrollment of those seniors who ranked in the upper half of their class according to either class rank or psychological test (over 91% and 87% respectively).

e. the college enrollment of the lower half of the class according to these criteria (over 74% and 85% respectively).

More girls than boys rank in the top quartile of their graduating class according to both class rank and a psychological test; however, proportionately more of these high-ranking boys than girls plan on and enroll in degree granting institutions. This difference in the college-going habits of boys and girls makes it necessary to report the facts for the sexes separately.

Because of the increasing national concern over securing adequately qualified and trained personnel for critical areas in the fields of science, mathematics, and engineering for which men are ordinarily recruited, it is important to note that over seventy-six per cent of Wisconsin's high-ranking boys enter degree granting institutions.

More of Wisconsin's high-ranking female high school graduates (over 15%) than its high-ranking male graduates (less than 2%) enter non-degree schools. When these boys consider furthering their education, almost ninety-eight per cent choose degree granting institutions, whereas of the school-going girls, only seventy-seven per cent choose such schools.

Wisconsin's high-ranking college-going boys and girls show similar patterns regarding selection of colleges. Almost equal proportions choose public, private, in and out-of-state schools. Over fifty-eight per cent of both sexes enter Wisconsin tax-supported colleges and university.

Further research should be undertaken to determine more fully those factors which might prove influential on the post-high school educational decisions of high ability youth. Some of these are:

- studies in Wisconsin and other states to further validate the findings of this investigation.
- continuing studies over a period of years regarding parental background factors and their influence.
- studies including other family background factors such as divorced or separated parents, working mother, number, age, and education of siblings, socio-cultural status of the family, foreign-born parents, and special group influences.
- comparative studies of parental influences between scholastically talented and non-scholastically talented youth.
- follow-ups of the college-going talented youth in order to determine parental influence on their college careers and vocational decisions.
- follow-ups of those talented youths who did not choose to enter degree granting institutions to determine if parental factors operated to keep them from entering college.

## Concluding Statement

This study has pointed out the extent to which certain parental background factors help influence the post-high school educational decisions of scholastically talented youth. Furthermore, it has shown that there is a high degree of stability in the college-going plans of both male and female high-ranking graduates. These findings should prove helpful to those charged with the responsibilities of guiding scholastically talented youth and planning programs of higher education for them.

# APPENDICES

## Appendix A -- First Letter to High School Principals Concerning Survey of Seniors

WISCONSIN
STATE DEPARTMENT
OF
PUBLIC INSTRUCTION

SCHOOL OF EDUCATION
UNIVERSITY OF WISCONSIN

Madison, Wisconsin
April 18, 1957

To Principals of Wisconsin High Schools:

SUBJECT: SURVEY OF POST-HIGH SCHOOL PLANS OF 1957 HIGH SCHOOL GRADUATES

As a part of a series of studies being conducted upon the nature and extent of needs for post-high school education in Wisconsin, the State Department of Public Instruction and the School of Education, University of Wisconsin, are cooperating in a survey of the post-high school plans of the seniors who will graduate from Wisconsin high schools this spring.

This project will provide information upon a state-wide basis about (1) the plans which Wisconsin high school graduates have with respect to post-high school training, and (2) factors which are influencing these plans.

The data which will be collected are expected to have usefulness not only for those who must plan for post-high school education, but will have significance for counseling and guidance, curriculum, and the identification and development of talented youth in Wisconsin in high schools. The project will be under the direction of Dr. J. Kenneth Little, Vice President, Student Affairs, and Professor of Education, University of Wisconsin.

Within a few days you will receive a set of forms - "My Plans Beyond High School" - which we ask you to have completed by the members of your graduating class this spring. A list of the graduates showing rank in class, and identifying students believed to have unusual talents or abilities will also be requested. Complete instructions will be sent to you by Dr. Little.

The information furnished by the schools in connection with this project will be used only for the purposes of the research project. Information about individual students or individual schools will not be made available to persons other than the research staff, nor will such information be made public as a part of a report of the research project.

After the necessary data is coded for purposes of the research project, it is planned that the forms will be returned to the schools for their own use and follow-up study.

Your cooperation in helping provide this needed information will be sincerely appreciated.

G. E. Watson
State Superintendent of Public Instruction

Lindley J. Stiles
Dean, School of Education

## Appendix B -- Second Letter to High School Principals Concerning Survey of Seniors

University of Wisconsin
Madison, Wisconsin
April 22, 1957

### SURVEY OF POST-HIGH SCHOOL PLANS
(Spring 1957)

Dear Principal:

A few days ago, you received a letter signed by State Superintendent G. E. Watson and Dean Lindley J. Stiles, University of Wisconsin, asking your cooperation in a survey of the post-high school plans of seniors graduating from Wisconsin high schools this spring.

The questionnaire forms will reach you within a few days. An instruction sheet for their use is attached to this letter.

The data provided in this study are expected to serve the following purposes:

1. To provide state-wide information about the plans of Wisconsin's high school graduates, and some of the factors influencing these plans.
2. To show what part of Wisconsin's most talented youth are continuing schooling beyond high school; and the plans of talented youth who are not continuing schooling.
3. To provide information on the financial needs of graduates who would like to continue schooling, and the extent to which present scholarship programs meet these needs.
4. To provide a basis for follow-up studies of the post-high school activities and achievements of Wisconsin high school graduates.
5. To provide facts useful in developing counseling programs for talented youth, and in planning their total high school experience.

The data furnished in this study by individual pupils or by individual schools will be used for research purposes only, and will be available only to members of the research staff. After the data is coded for research purposes, it is planned that the forms will be returned to the schools for their own use and follow-up study.

This project has been discussed with the Research Committee and members of the Executive Committee of the Wisconsin Association of Secondary School Principals.

I greatly appreciate your cooperation in securing this needed information, and invite your suggests or comment upon any phase of the study.

J. Kenneth Little

J. Kenneth Little
Professor of Education
Director, Survey of Post-High
School Plans

enc.

# Appendix C -- Instructions for Administration of Student Questionnaires

## SURVEY OF POST-HIGH SCHOOL PLANS
## (Spring 1957)

### Instructions

A. Administration of Questionnaire

1. The forms are to be completed by all high school seniors who will graduate this spring (1957).

2. According to our information about the number of your graduates, the number of forms sent to you should be sufficient. If you must have more forms, please get in touch with Dr. J. Kenneth Little, 123 Bascom Hall, University of Wisconsin, Madison. (Telephone Al 5-3311, extension 4612).

3. The questionnaire should be completed in the presence of a teacher or other person who can interpret the items of information requested if such interpretation is needed.

4. It is suggested that the person in charge make the following a part of his introductory statement:

> THIS IS PART OF A STATE-WIDE STUDY IN WHICH THE GRADUATING SENIORS IN ALL WISCONSIN HIGH SCHOOLS ARE HELPING. A LARGE NUMBER OF HIGH SCHOOL SENIORS PLAN TO CONTINUE SOME KIND OF SCHOOLING OR TRAINING BEYOND HIGH SCHOOL. A STILL LARGER NUMBER DO NOT GO TO SCHOOL BEYOND HIGH SCHOOL. SOME STUDENTS WOULD LIKE TO HAVE MORE SCHOOLING BUT FIND THAT FOR SOME REASON THEY CANNOT DO IT. THOSE WHO ARE PLANNING EDUCATIONAL PROGRAMS FOR WISCONSIN YOUTH WILL BE GREATLY HELPED BY KNOWING MORE ABOUT WHAT HIGH SCHOOL GRADUATES DO OR WANT TO DO.
>
> THIS QUESTIONNAIRE ASKS YOU TO TELL WHAT YOUR OWN PLAN IS, WHAT YOU WOULD LIKE TO DO IF YOU COULD, AND TO ANSWER SOME QUESTIONS ABOUT THE CIRCUMSTANCES WHICH HAVE INFLUENCED YOUR PLANS. PLEASE READ THE QUESTIONS CAREFULLY AND GIVE THE BEST ANSWERS YOU CAN.

5. The time needed for completing the questionnaire is estimated at 15-20 minutes.

B. Information to be Furnished by the High School

One major purpose of this study is to compare youth who plan to continue schooling with those who do not, particularly those who are believed to have high promise in socially useful directions.

Present studies indicate that the use of rank-in-class and I.Q. is helpful but, that other qualities -- unusual drive, persistence, self-starting ability, originality, creativity, organizing ability, leadership skills, etc., usually distinguish the truly promising individual among pupils who may have equally high academic achievement and native intelligence.

As a part of this study we are asking each high school to give us the following information:

158

1. An alphabetic list of names of seniors graduating in spring, 1957.

2. Rank in class of each graduate (use ranks as furnished on transcripts).

3. List of names of students, if any, who, regardless of their rank in class or I.Q., in judgment of the teachers or counselors have very high potential in a direction which should by all means be further developed by post high school training. Indicate the field of their excellence.

SPECIAL NOTE: (1) The students named should be those whose ability, skill, or achievement would recommend them for state-wide comparison or competition in their fields, and whose promise is so great that to provide full financial aid, if needed, for further training and education would be widely regarded as a "wise social investment".

(2) The areas of accomplishment might be literary, musical, scientific, mechanical, athletic, dramatic, leadership, managerial, or other. "Further schooling" does not necessarily mean earning a college degree. It could be some other form of advanced or specialized training.

(3) The number of high potential students ordinarily would not exceed 10-15% of the graduating class. Do not hesitate to include more than 10-15%, if you have such students: There may be no such student; if so, state "None recommended".

(4) Some of these students may be the same as those identified by rank in class. Others may not.

This list will thus extend the range of persons who ought to be considered as Wisconsin's 1957 crop of most promising youth.

SUGGESTED FORM

SCHOOL ______________________________

| Name | Rank in Class | Field of Excellence (if name is starred) |
|---|---|---|
| Anderson, Mary | 30/250 | |
| Bishop, John | 50/250 | |
| Chilson, Jerry* | 1/250 | Mathematics |
| Drives, William | 65/250 | |
| Evenson, Charlene* | 75/250 | Music |

*High potential

---

SEND OR BRING (1) THE COMPLETED QUESTIONNAIRE FORMS
(2) THE LIST OF GRADUATES, WITH RANKS, AND IDENTIFICATION OF YOUTH WITH HIGH POTENTIAL

TO: STATE DEPARTMENT OF PUBLIC INSTRUCTION
STATE CAPITOL BUILDING
MADISON 2, WISCONSIN

HSR _____
HN _____

# Appendix D -- Student Questionnaire

## MY PLANS BEYOND HIGH SCHOOL

Do not write in this col.
1-6 _____
7-8 _____
9-10 _____
11 _____
12 _____

Name _____ Age _____ M _____ F _____

School _____ Home address _____

_____ Father's name _____
(or other parent or guardian)

1. I plan: (Place a cross (x) before the statement which describes what you plan to do next year)

_____ To continue going to school
_____ To get a job
_____ To become an apprentice
_____ (Other, specify) _____
_____ To go into military service
_____ To work at my home
_____ I have no definite plans

13 _____

If the plan you have checked is not what you would really like to do, place an (L) in front of the statement above which described what you would most like to do, then state what circumstances prevent you from doing what you would most like to do. _____

14 _____
15 _____

How sure are you that you will be doing what you plan? _____ certain _____ uncertain

16 _____

2. If you checked that you plan to go to school next year, what kind of school do you plan to attend?

Public
_____ Vocational school
_____ County teachers college
_____ State college
_____ University

Private
_____ Liberal arts college
_____ University
_____ Business or trade school
_____ Other _____
(Specify)

17 _____

Do you plan to attend school outside Wisconsin? _____ yes _____ no

18 _____

I plan to attend school _____ full-time _____ part-time

19 _____

3. If you plan to continue your schooling or training, answer the items below. If not, go to question 4.

I plan to enter the following courses or fields:

In trade or vocational school _____
Specify field or training

Apprenticeship _____
Specify field or trade

College or university: (check the field of your interest)

____ Agriculture
____ Architecture
____ Aeronautics
____ Business
____ Chemistry
____ Dentistry
____ Undecided
____ Engineering
____ Fine Arts
____ Forestry
____ Home Economics
____ Journalism
____ Law
_____ (Other)
____ Liberal Arts
____ Medicine
____ Nursing
____ Pharmacy
____ Social Work
____ Teaching
____ Veterinary

20-21 _____

4. If you plan to get a job next year, check the statement below which applies to you.

____ I have applied, but do not yet have a job
____ I have applied and have been accepted
____ I have not applied
____ I will continue in a job I now have
____ Other _____

My job will be: (describe) _____

22-23 _____

(Name of firm) _____

It will pay about _____ per week

24 _____

5. To what extent have you discussed your plans with your teachers or school counselors?

_____ not at all _____ some _____ very much

How much did they influence your plans?

_____ not at all _____ some _____ very much

25 _____

6. To what extent have you discussed your plans with your parents?
____ not at all ____ some ____ very much

How much did they influence your plans?
____ not at all ____ some ____ very much 26____

7. Education of father and mother (check highest level attained)

| | Father | Mother | |
|---|---|---|---|
| High School | | | |
| did not attend | ____ | ____ | |
| attended | ____ | ____ | |
| graduated from | ____ | ____ | |
| Trade or business school: | | | |
| attended | ____ | ____ | |
| College: | | | |
| attended | ____ | ____ | |
| graduated from | ____ | ____ | |
| has master's or Ph.D. degree | ____ | ____ | 27____ |
| Do not know | ____ | ____ | 28____ |

8. Education of older brother and sister who have had most schooling. (Check the highest level reached; if more than one, show number at each level.)

| | Brother | Sister | |
|---|---|---|---|
| Some high school | ____ | ____ | |
| High school graduate | ____ | ____ | |
| Some college | ____ | ____ | |
| Attending college | ____ | ____ | |
| College graduate | ____ | ____ | 29____ |
| Attending graduate school (or attended) | ____ | ____ | |
| None older | ____ | ____ | 30____ |

9. (a) My father is engaged in the type of occupation checked in the left hand column below.
(b) I hope eventually to enter the type of occupation checked in the right hand column below.

Father — Me

____ Office work (cashier, clerk, secretary, bookkeeper, etc.) ____
____ Professional (doctor, lawyer, minister, teacher, etc.) ____
____ Executive (manages large business, industry, firm) ____
____ Factory worker (laborer, janitor, farm hand, etc.) ____
____ Salesman (insurance, real estate, auto, store, etc.) ____
____ Owns, rents, manages small business (store, station, newspaper, cafe, etc. ____ 31____
____ Owns, rents, manages farm ____
____ Other occupation (be specific) ________________ ____ 32____

(c) If your mother has a job outside the home, place an (M) before the type of occupation in which she works. 33____

10. How much do you think it costs per school year to attend college away from home?
____ Less than $1000 ____ Between $1500 and $2000
____ Between $1000 and $1500 ____ More than $2000 34____

11. How do you estimate the ability of your parents to help you go to college, if you desire to go?
____ can easily afford it ____ cannot afford it
____ can afford it, but with much sacrifice ____ I must work to help support the family 35____

12. In terms of income or wealth of families in my community, I think my family is:
____ considerably above average ____ average
____ somewhat above average ____ somewhat below average
____ considerably below average 36____

13. (a) Have you ever considered attending college? ____ yes ____ no
(b) If no, would you consider it if you had the money ____ yes ____ no 37____
(c) Would you borrow money for college expenses if you could pay it back on the installment plan after leaving college ____ yes ____ no 38____
(d) About how much could you or your family contribute to your college expenses next year (if you were going)?
____ none ____ less than $500 ____ Between $500 and $1000
____ between $1000 and $1500 ____ all my expenses 39____

14. Did you apply for admission to a school or college? (Check the statements which apply to you)

____ I have not applied
____ I have not applied, but plan to
I have applied but was refused because:
  ____ I did not rank high enough
  ____ I did not take the right subjects
  ____ The school could not take more students

____ I have applied, but have not heard
____ I plan to apply
____ I have been tentatively admitted, and expect to attend:

________________________ (Name of School(s) )
________________________ (Name of School)
40. ____

I sent applications to ____________ (number) schools 41. ____

15. Did you take the National Merit Scholarship Examinations? ____ yes ____ no 42. ____

16. Did you take the College Entrance Board Examinations: ____ yes ____ no

____ Scholastic Aptitude Test
____ Subject matter in (fields) ________________________ 43. ____

17. Have you applied for a scholarship?

____ I did not apply
____ I have applied, but have not yet heard
____ I have applied, but was not successful
I have received a scholarship from:

____ a college ________________________ (Name)

____ company or corporation ________________________ (Name)

____ organization or society ________________________ (Name)

____ other ________________________ 44. ____

18. The scholarship or awards I have will pay the following part of my college expenses next year:

____ tuition, one semester
____ tuition, both semesters
____ tuition, plus $ ____________
____ $ ____________ (cash)
____ all expenses 45. ____

19. If you are going to school next year what part of your school or college expenses do you expect to provide from summer earnings or part-time work at school?

____ Less than $250
____ Between $250 and $500
____ Between $500 and $750
____ More than $750 46. ____

20. Has marriage or the early prospect of marriage influenced your plan for next year? ____ yes ____ no 47. ____

21. Place a circle around the number of semesters in which you studied the following subjects?

| | | | |
|---|---|---|---|
| Algebra | 0 1 2 3 4 | English | 0 2 4 6 8 |
| Geometry | 0 1 2 3 4 | History | 0 2 4 6 8 |
| Trigonometry | 0 1 2 3 4 | Social Studies | 0 2 4 6 8 |
| Biology | 0 1 2 3 4 | Foreign Language | 0 2 4 6 8 |
| Chemistry | 0 1 2 3 4 | Specify Language (s) ____________ | |
| Physics | 0 1 2 3 4 | | |

48-53. ____
54-57. ____

Did you take a college preparatory course? ____ yes ____ no 58. ____

22. Did your high school give you practice in the following college-type experiences? (Check those in which you had considerable experience)

____ Taking notes from lectures
____ Writing term reports
____ Taking final semester examinations during a scheduled period
____ Making individual studies with oral reports
____ Long-term assignments
____ Planning own use of study time rather than required study period
____ (If other, describe) ________________________ 59. ____

23. For the work I want to do, a college education is:
____ necessary ____ desirable ____ unnecessary 60.____

24. My teachers in high school have:
____ encouraged me to go to college
____ discouraged me from going to college
____ have had no effect on my decision 61.____

25. My parents:
____ want me to go to college ____ do not care whether I go
____ do not want me to go ____ will not let me go 62.____

26. Most of my friends are:
____ going to college ____ going into military service
____ getting jobs ____ other ____________________ 63.____

27. High school studies:
____ have been interesting; I want to learn more
____ have been uninteresting; I would rather work than study
____ have had no especial influence upon my plans 64.____

28. The prospect of military service: (boys only)
____ has influenced me to attend college and join the ROTC
____ has made me uncertain about my future plans
____ has caused me to plan a military career
____ has had no influence upon my plans

29. The fact that boys must go into military service: (girls only)
____ has caused me to be unsettled in my plans
____ has had no influence upon my decisions
____ has caused me to plan to enter military service too 65.____

30. Which of the following statements best describe your opinion of the value of going to college? (Answer whether you plan to go to college or not. Check the 3 statements which seem most important to you.)
____ I would rather start earning money quickly, and learn on the job
____ I (am) would be greatly dissatisfied to stop at my present level of knowledge
____ College life and activities (like athletics) attract me very much
____ College graduates get jobs with better pay
____ The country needs more people who have highly developed skills and knowledge
____ College is a good place to meet a worthy life-mate
____ Skilled laborers get paid as much as most college graduates
____ Going to college enables you to study more lines of work before deciding on a career
____ A college education helps you live a happier, more complete life
____ Going to college costs more than it is worth
____ College studies will make you work at a high intellectual level, and I like that
____ College graduates usually have the leadership positions
____ Learning on a job is more practical than most school learning
____ Persons who do not have college educations often make better leaders
____ College life broadens you socially, and developes your personality
____ Success in life depends upon ability and effort, not amount of education
____ Going to college would be a waste of time for me
____ Going to college has just been accepted; I have never thought of anything else 66*____

WISCONSIN STATE DEPARTMENT OF PUBLIC INSTRUCTION
AND
SCHOOL OF EDUCATION, UNIVERSITY OF WISCONSIN

April, 1957

WISCONSIN
STATE DEPARTMENT
OF
PUBLIC INSTRUCTION

## Appendix E -- Letter to High School Principals Requesting Return of Student Questionnaires

SCHOOL OF EDUCATION
UNIVERSITY OF WISCONSIN

Madison, Wisconsin
June 5, 1957

Dear Principal:

Upon checking our records of participation by Wisconsin high schools in the senior survey, "My Plans Beyond High School", I find that we did not receive the completed forms from your high school. I hope that the materials were not lost in transit. If you still have them but have not yet sent them in, this request is premature. If for some reason your school was not able to participate in the whole project, I hope you may be able to supply our research staff with the following information about your graduating class:

1. List of names
2. Ranks in class of each
3. Identify those who plan to attend college or university
4. If possible, name the school or college they plan to attend

This kind of information will help us give a complete picture of the plans of Wisconsin 1957 high school seniors.

Your help will be much appreciated.

Sincerely yours,

Kenneth Little

Kenneth Little, Director
Survey on Plans for Education
Beyond High School

P.S. Please send the information to:

Kenneth Little
123 Bascom Hall
University of Wisconsin
Madison 6, Wisconsin

WISCONSIN
STATE DEPARTMENT
OF
PUBLIC INSTRUCTION

## Appendix F -- Letter to High School Principals Requesting Information on Graduates

SCHOOL OF EDUCATION
UNIVERSITY OF WISCONSIN

Madison, Wisconsin
June 17, 1957

Dear Principal:

The completed blanks on the Senior Survey "My Plans Beyond High School" for your high school were received in good order. Thank you very much.

We did not find with them the list of your graduating seniors (1) showing their rank in graduating class, and (2) identifying those whom your teaching staff think have unusual promise.

This is not to hurry you if you have postponed sending this until the close of the school year. We shall be glad to have it when it is ready. If you have overlooked sending this list, however, I hope you can still give us:

(1) A list of your graduating seniors;

(2) Their ranks in their class (as you would report for transcripts);

(3) Identify any youth who has, in your staff's opinion, unusual promise in some special field.

A self-addressed envelope is enclosed for your reply.

We are very close to a 100% participation in this study, and I hope very much that we can make it complete. The help you, your students, and your staff have given to this project is indeed appreciated.

Sincerely yours,

Kenneth Little

Kenneth Little, Director
Survey on Plans for Education
Beyond High School

enc.

STATE DEPARTMENT
OF
PUBLIC INSTRUCTION

## Appendix G -- First Letter to High School Principals Requesting Class Ranks of Graduates

SCHOOL OF EDUCATION
UNIVERSITY OF WISCONSIN

Madison, Wisconsin
October 5, 1957

Dear Principal:

Last Spring when you returned the forms — "MY PLANS BEYOND HIGH SCHOOL" which your seniors had completed, we asked that you provide a list of your graduating seniors showing the rank in class of each student. This information from your school is incomplete, and is very much needed.

We have enclosed an alphabetic list of your seniors who completed the questionnaire. Will you please record on this list the rank in class for each of these students, and return it to us in the enclosed self-addressed and stamped envelope? If you have the information on a sheet which you have already prepared, you may substitute that.

The response to this study has been almost 100%, and some valuable and interesting information will result. You will receive a summary of the results of the study. Thank you very much for your very good help.

Sincerely yours,

J. Kenneth Little, Director
High School Survey

THE STATE OF WISCONSIN
CO-ORDINATING COMMITTEE FOR HIGHER EDUCATION

OFFICE OF JOINT STAFF
714 STATE OFFICE BUILDING
MADISON 2, WISCONSIN

## Appendix H -- Letter to Parents Explaining Parental Follow-Up Survey

Dear Parents:

Last Spring shortly before high school graduation your son (or daughter) completed a questionnaire which asked him (her) about his (her) plans beyond high school. He (she) did this as a part of a state-wide inquiry to learn how many of Wisconsin's high school graduates were planning to continue their education beyond high school.

This Fall the parents of some of these young people are being asked to report what their sons (daughters) are now doing. The information requested will help determine whether these young people have been able to carry out their plans and what their fathers and mothers think about their plans.

About 35,000 graduates (95 per cent of all high school seniors) reported their plans. Approximately 5,000 parents are being asked to report on those plans this fall. This information will be used by the Co-ordinating Committee for Higher Education in Wisconsin which has the responsibility for determining the needs for higher education in this state, and making recommendations to the Governor and to the Legislature as to the ways in which these needs should be met.

The attached brief questionnaire can be answered in a very few minutes. This information is very much needed in developing Wisconsin's plans for higher education, and the usefulness of the study depends upon getting a reply from each parent.

Please check your answers to the questions now and return it in the next mail. A self-addressed and stamped envelope has been enclosed for your prompt reply.

Your help will be much appreciated.

Sincerely yours,

J. Kenneth Little

J. Kenneth Little, Member
Joint Staff and Director of Survey

October, 1957

## Appendix I -- Parental Questionnaire

**TO THE PARENTS: Please give the answers to the questions or statements below which correctly or best describe the fact or opinion requested. Either the father or mother may respond, or the answers may be given jointly. Place a check (✓) in front of your answer, or write answer in space provided.**

**1. a. My son (or daughter) who graduated from high school last Spring:**

_____ has a job
_____ is in military service
_____ is married and is a homemaker
_____ is continuing education through correspondence study
_____ is unemployed
_____ is going to school
_____ ________________________________ (other)

**b. If he (or she) is going to school, is he (or she) going** _____ **full time?**
_____ **part time?**

**2. If your son (or daughter) is going to school, please give the following information:**

________________________________ ________________________________
Name of School or College City State

____ ________________________________________________
Course (Such as liberal arts, business, law, nursing, teaching, home economics)
(If taking trade or apprentice training, name the trade.)

**3. Did you want your son (or daughter) to continue his education beyond high school?** _____ **yes** _____ **no**

**4. If you wanted your son (or daughter) to continue his schooling and he (or she) is not doing so, what prevented it? (If you answered "no" to question 3, skip this question, and go to question 5.)**

_____ he (or she) did not want to
_____ plans to go at a later date
_____ did not qualify for admission
_____ his best friend(s) did not go
_____ could not afford it
_____ could not find satisfactory place to live at the school
_____ no school of type wanted is closely available

_____ ________________________________________________
(other) specify

**5. If you did not want him (her) to continue schooling, what was the major reason?**

_____ Wanted him to help with my business (or work at home)
_____ Wanted him to enter military service
_____ Wanted him to get a job and earn money
_____ Further education is too much a luxury
_____ College life is not a good influence
_____ Costs too much
_____ Family needs income he could earn
_____ Is not a strong student

_____ ________________________________________________
(If other reason, please state)

**6. a. Did you advise your son (or daughter) to prepare for college?** _____ **yes** _____ **no**

**b. Did your son (or daughter) take the following subjects in high school? (check those which he or she took)** _____ **Algebra** _____ **geometry** _____ **foreign language**

(Please turn to other side)

7. In terms of the income or wealth of families in our community, our family is:

____ above average ____ average ____ below average

8. The following statements are opinions which some people hold about the value of a college education. Please check the statements which most closely express your own opinions. If none of these statements express your opinion, write your opinion in the blank space at the end of the list.

____ It is better to learn a job, skill or trade than to go to college.

____ A college education is worth making the financial sacrifice it requires.

____ Success in life depends upon ability and effort, not amount of education.

____ Persons who do not have a college education are at a social disadvantage in life.

____ Going to college costs more than it is worth.

____ The school of "hard knocks" is more valuable than a college education.

____ A college education is required to get good jobs and to advance in them.

____ You do not need a college education to earn good money and be leaders in your communities.

____ People with a college education live more satisfying and interesting lives than those without a college education.

____ Too many young people are going to college.

____ Too many capable young people who desire to go to college are not able to go.

____ Going to college is not worth while for many young people who go.

____ People who learn on the job, use libraries, and teach themselves are as well-educated as those who go to colleges.

____ ________________________________________

____ ________________________________________

(Use the space above to state any other opinion or information which you may wish to give.)

9. Who gave the answers? ____ father ____ father and mother jointly

____ mother ____ ____________________ (other)

THANK YOU VERY MUCH

Joint Staff
Co-ordinating Committee for Higher Education
High School Parent Survey
October 1957

## Appendix J -- Second Letter to High School Principals Requesting Class Ranks of Graduates

SCHOOL OF EDUCATION
UNIVERSITY OF WISCONSIN

Madison, Wisconsin
December 14, 1957

Dear Principal:

Last spring you returned the forms -- "My Plans Beyond High School" -- which your graduating seniors had completed, and also a list indicating the class rank of each senior.

The questionnaires are now being tabulated and analysed. We would appreciate it very much if you would give us the class rank of ________________ which was not included on the original list.

If you cannot give the exact class rank, then we would appreciate an estimate of the quartile the student ranked in, such as 1-24, 25-49, 50-74 or 75-99.

Thank you very much for your cooperation in this matter.

Sincerely yours,

J. Kenneth Little, Director
High School Survey

SCHOOL OF EDUCATION
UNIVERSITY OF WISCONSIN

## Appendix K -- Letter to High School Principals Requesting Test Scores

Madison 6, Wisconsin
March 1, 1958

Dear Principal:

Last Spring you returned the forms -- "My Plans Beyond High School" -- which your 1957 seniors had completed together with data regarding their class rank.

The questionnaires have been tabulated and are being analyzed. We are making a special study of youth who ranked in the top quartile both in their class and in an intelligence test. We obtained Henmon-Nelson test scores for most of the students under consideration from the Student Counseling Center, University of Wisconsin. However, we have found no test score on the students listed below.

We would appreciate very much your cooperation in furnishing us with an intelligence test score on these people who are included in the sample study. If the score on the Henmon-Nelson Test of Mental Ability is not available, please report on any other intelligence test you may have administered. Kindly indicate the name of the test and the percentile rank or I.Q. If no intelligence test was administered, kindly indicate so.

A self-addressed and stamped envelope is enclosed for your reply. Your cooperation is appreciated.

Sincerely yours,

Kenneth Little

J. Kenneth Little, Member
Joint Staff and Director of Survey

| STUDENT | NAME OF TEST | PERCENTILE RANK (CLASS) - or - I.Q. |
|---|---|---|

## Appendix L -- Second Letter to Parents Requesting Return of Questionnaire

THE STATE OF WISCONSIN

CO-ORDINATING COMMITTEE FOR HIGHER EDUCATION

Office of Joint Staff
714 State Office Building
Madison 2, Wisconsin

March 1958

Dear Parents:

Last Fall you received a questionnaire asking for information about your son (or daughter) who graduated from high school in the Spring of 1957.

Parents are still sending their replies, but this study must be completed soon, and we have not heard from you. Because you may have mislaid your questionnaire, another copy is enclosed. The information you can give is much needed in this state-wide study of Wisconsin's 1957 high school graduates.

Use the self-addressed stamped envelope for a prompt reply.

Sincerely yours,

J. Kenneth Little, Member
Joint Staff and Director of Survey

P. S. Because of the excellent high school record made by your child, the information you can give is especially important to this study.

## Appendix M -- Personal Note to Parents Requesting Return of Questionnaire

Dear Mr. __________,

You are one of the few who have not as yet completed this questionnaire. Would you please do so at your earliest convenience.

Thank you.

## Appendix N -- Personal Letter to Parents Requesting Return of Questionnaire

Madison, Wisconsin
April 25, 1958

Dear Mr. ____________,

We are still trying to complete our survey of outstanding high school graduates of June 1957.

Will you please help us in this important project? We have heard from almost all of the parents. You are one of the few we still need to hear from.

Even though your son (daughter) ________ did not continue on to school, your answers are important.

Thank you for your cooperation.

Sincerely yours,

J. Kenneth Little, Director
Parent Survey

# Appendix O -- Map of Wisconsin Depicting Counties in Which Subjects Resided

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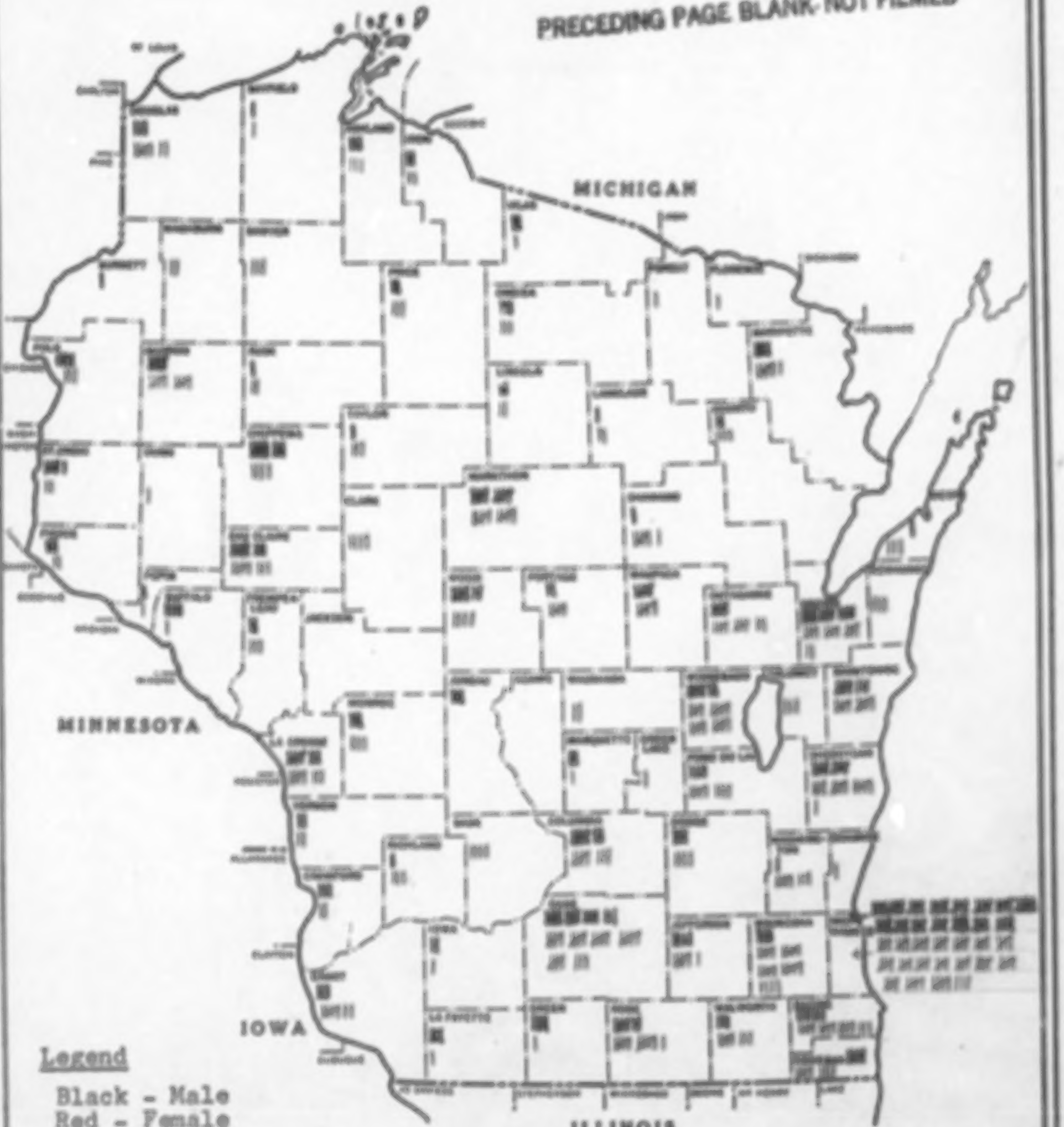
MICHIGAN
MINNESOTA
IOWA
ILLINOIS

Legend

Black - Male
Red - Female

# APPENDIX F

## TABLE 35

### AGREEMENT BETWEEN THE RANDOM SAMPLE AND THE TOTAL POPULATION CONCERNING THE EDUCATION OF THE PARENTS AS REPORTED BY THE MALE SUBJECTS

| | Random Sample | | | | Total Population | | | | Difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Father | | Mother | | Father | | Mother | | Father | Mother |
| | N | % | N | % | N | % | N | % | % | % |
| High school | | | | | | | | | | |
| did not attend | 957 | 35.3 | 694 | 25.8 | 5880 | 35.7 | 4206 | 26.1 | 0.4 | 0.3 |
| attended | 437 | 16.1 | 471 | 17.5 | 2683 | 16.3 | 2774 | 17.2 | 0.2 | 0.3 |
| graduated from | 502 | 18.5 | 821 | 30.5 | 3034 | 18.5 | 4968 | 30.8 | 0.0 | 0.3 |
| Trade or business school attended | 209 | 7.7 | 140 | 5.2 | 1343 | 8.1 | 899 | 5.6 | 0.4 | 0.4 |
| College | | | | | | | | | | |
| attended | 141 | 5.2 | 110 | 4.1 | 871 | 5.3 | 760 | 4.7 | 0.1 | 0.6 |
| graduated from | 209 | 7.7 | 234 | 8.7 | 1097 | 6.7 | 1338 | 8.3 | 1.0 | 0.4 |
| has masters or Ph.D. | 73 | 2.7 | 30 | 1.1 | 455 | 2.8 | 163 | 1.0 | 0.1 | 0.1 |
| Do not know | 184 | 6.8 | 191 | 7.1 | 1064 | 6.6 | 1010 | 6.3 | 0.2 | 0.8 |
| Total | 2712 | 100.0 | 2691 | 100.0 | 16427 | 100.0 | 16118 | 100.0 | | |

## TABLE 36

### AGREEMENT BETWEEN THE RANDOM SAMPLE AND THE TOTAL POPULATION CONCERNING THE EDUCATION OF THE PARENTS AS REPORTED BY THE FEMALE SUBJECTS

| | Random Sample | | | | Total Population | | | | Difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Father | | Mother | | Father | | Mother | | Father | Mother |
| | N | % | N | % | N | % | N | % | % | % |
| High School | | | | | | | | | | |
| did not attend | 1055 | 37.3 | 866 | 30.5 | 6487 | 37.9 | 5325 | 31.0 | 0.6 | 0.5 |
| attended | 464 | 16.4 | 525 | 18.5 | 2897 | 16.9 | 3188 | 18.6 | 0.5 | 0.1 |
| graduated from | 500 | 17.7 | 712 | 25.1 | 2990 | 17.4 | 4383 | 25.4 | 0.3 | 0.3 |
| Trade or business school attended | 243 | 8.6 | 216 | 7.6 | 1422 | 8.3 | 1250 | 7.3 | 0.3 | 0.3 |
| College | | | | | | | | | | |
| attended | 147 | 5.2 | 147 | 5.2 | 938 | 5.5 | 860 | 5.0 | 0.3 | 0.2 |
| graduated from | 178 | 6.3 | 241 | 8.5 | 1054 | 6.1 | 1423 | 8.3 | 0.2 | 0.2 |
| has master's or Ph.D. | 65 | 2.3 | 20 | 0.7 | 411 | 2.4 | 134 | 0.8 | 0.1 | 0.1 |
| Do not know | 175 | 6.2 | 111 | 3.9 | 945 | 5.5 | 613 | 3.6 | 0.6 | 0.3 |
| Total | 2827 | 100.0 | 2838 | 100.0 | 17144 | 100.0 | 17176 | 100.0 | | |

TABLE 37

AGREEMENT BETWEEN THE RANDOM SAMPLE AND THE TOTAL POPULATION
CONCERNING THE OCCUPATION OF THE FATHER

| | Random Sample | | | | Total Population | | | | Difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | | Female | | Male | | Female | | Male | Female |
| | N | % | N | % | N | % | N | % | % | % |
| Office work | 101 | 3.9 | 96 | 3.6 | 604 | 4.0 | 601 | 3.7 | 0.1 | 0.1 |
| Professional | 160 | 6.2 | 141 | 5.3 | 926 | 6.1 | 847 | 5.2 | 0.1 | 0.1 |
| Executive | 186 | 7.2 | 141 | 5.3 | 943 | 6.2 | 799 | 5.0 | 1.0 | 0.3 |
| Factory worker | 896 | 34.7 | 983 | 37.0 | 5354 | 35.3 | 5792 | 35.7 | 0.6 | 1.3 |
| Salesman | 132 | 5.1 | 141 | 5.3 | 776 | 5.1 | 804 | 5.0 | 0.0 | 0.3 |
| Small business | 294 | 11.4 | 319 | 12.0 | 1541 | 10.2 | 1849 | 11.4 | 1.2 | 0.6 |
| Agriculture | 506 | 19.6 | 502 | 18.9 | 2967 | 19.6 | 3203 | 19.7 | 0.0 | 0.8 |
| Skilled worker | 237 | 9.2 | 271 | 10.2 | 1691 | 11.2 | 1964 | 12.1 | 2.0 | 1.9 |
| Other work | [illegible] | 2.7 | 64 | 2.4 | 345 | 2.3 | 355 | 2.2 | 0.4 | 0.2 |
| Total | 2582 | 100.0 | 2658 | 100.0 | 15147 | 100.0 | 16214 | 100.0 | | |

## TABLE 38

### AGREEMENT BETWEEN THE RANDOM SAMPLE AND THE TOTAL POPULATION CONCERNING THE ECONOMIC STATUS OF THE FAMILY

| | Random Sample | | | | Total Population | | | | Difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | | Female | | Male | | Female | | Male | Female |
| | N | % | N | % | N | % | N | % | % | % |
| Considerably above average | 67 | 2.5 | 34 | 1.2 | 362 | 2.3 | 225 | 1.3 | 0.2 | 0.1 |
| Somewhat above average | 577 | 21.5 | 478 | 17.0 | 3348 | 20.9 | 2787 | 16.3 | 0.6 | 0.7 |
| Average | 1853 | 69.0 | 2088 | 74.3 | 11182 | 69.8 | 12884 | 75.4 | 0.8 | 1.1 |
| Somewhat below average | 169 | 6.3 | 196 | 7.0 | 1045 | 6.5 | 1103 | 6.5 | 0.2 | 0.5 |
| Considerably below average | 19 | 0.7 | 14 | 0.5 | 87 | 0.5 | 79 | 0.5 | 0.2 | 0.0 |
| Total | 2685 | 100.0 | 2810 | 100.0 | 16024 | 100.0 | 17078 | 100.0 | | |

TABLE 39

AGREEMENT BETWEEN THE RANDOM SAMPLE AND THE TOTAL POPULATION CONCERNING THE ABILITY OF THE PARENTS TO HELP FINANCE A COLLEGE EDUCATION

| | Random Sample | | | | Total Population | | | | Difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | | Female | | Male | | Female | | Male | Female |
| | N | % | N | % | N | % | N | % | % | % |
| Can easily afford it | 390 | 16.2 | 442 | 17.8 | 2253 | 15.7 | 2589 | 17.0 | 0.5 | 0.8 |
| Can afford it, but with much sacrifice | 1226 | 50.9 | 1307 | 52.7 | 7482 | 52.3 | 8049 | 52.8 | 1.4 | 0.1 |
| Cannot afford it | 732 | 30.4 | 665 | 26.8 | 4181 | 29.2 | 4221 | 27.8 | 1.2 | 1.0 |
| I must work to help support the family | 60 | 2.5 | 67 | 2.7 | 397 | 2.8 | 357 | 2.4 | 0.3 | 0.3 |
| Total | 2408 | 100.0 | 2481 | 100.0 | 14313 | 100.0 | 15216 | 100.0 | | |

## TABLE 40

### AGREEMENT BETWEEN THE RANDOM SAMPLE AND THE TOTAL POPULATION CONCERNING PARENTS WHO ENCOURAGED THEIR CHILDREN TO ATTEND COLLEGE

| | Random Sample | | | | Total Population | | | | Difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | | Female | | Male | | Female | | Male | Female |
| | N | % | N | % | N | % | N | % | % | % |
| Want me to go to college | 1580 | 58.9 | 1331 | 47.8 | 9657 | 60.2 | 8172 | 48.2 | 1.3 | 0.4 |
| Do not want me to go | 80 | 3.0 | 198 | 7.1 | 484 | 3.0 | 1219 | 7.2 | 0.0 | 0.1 |
| Do not care whether I go | 1012 | 37.7 | 1240 | 44.5 | 5839 | 36.4 | 7438 | 43.9 | 1.3 | 0.6 |
| Will not let me go | 11 | 0.4 | 17 | 0.6 | 72 | 0.4 | 116 | 0.7 | 0.0 | 0.1 |
| Total | 2683 | 100.0 | 2786 | 100.0 | 16052 | 100.0 | 16945 | 100.0 | | |

## TABLE 41

## AGREEMENT BETWEEN THE RANDOM SAMPLE AND THE TOTAL POPULATION CONCERNING THE AMOUNT OF INFLUENCE PARENTS HAD ON THEIR CHILDREN'S PLANS

| | Random Sample | | | | Total Population | | | | Difference | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Male | | Female | | Male | | Female | | Male | Female |
| | N | % | N | % | N | % | N | % | % | % |
| No influence | 318 | 11.7 | 264 | 9.3 | 1969 | 12.1 | 1577 | 9.2 | 0.4 | 0.1 |
| Some influence | 1630 | 60.0 | 1499 | 52.8 | 9853 | 60.8 | 9389 | 54.4 | 0.8 | 1.6 |
| Very much influence | 769 | 28.3 | 1076 | 37.9 | 4395 | 27.1 | 6273 | 36.4 | 1.2 | 1.5 |
| Total | 2717 | 100.0 | 2839 | 100.0 | 16217 | 100.0 | 17239 | 100.0 | | |

# APPENDIX Q

TABLE 42

OPINIONS ON THE VALUE OF A COLL

| Item |
|---|
| 1. I would rather start earning money quickly, and learn on the job |
| 2. I (am) would be greatly dissatisfied to stop at my present level of knowledge |
| 3. College life and activities (like athletics) attract me very much |
| 4. College graduates get jobs with better pay |
| 5. The country needs more people who have highly developed skills and knowledge |
| 6. College is a good place to meet a worthy life-mate |
| 7. Skilled laborers get paid as much as most college graduates |
| 8. Going to college enables you to study more lines of work before deciding on a career |
| 9. A college education help you live a happier, more complete life |
| 10. Going to college costs more than it is worth |
| 11. College studies will make you work at a high intellectual level, and I like that |
| 12. College graduates usually have the leadership positions |
| 13. Learning on a job is more practical than most school learning |
| 14. Persons who do not have college educations often make better leaders |
| 15. College life broadens you socially, and developes your personality |
| 16. Success in life depends upon ability and effort, not amount of education |
| 17. Going to college would be a waste of time for me |
| 18. Going to college has just been accepted; I have never thought of anything else |
| Invalid |
| Total |

BLE 42

A COLLEGE EDUCATION (MALE)

| College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|
| N | % | N | % | N | % | % Difference | Chi$^2$ |
| 2 | 0.3 | 9 | 4.1 | 11 | 1.2 | 3.8 | 12.675* |
| 102 | 14.1 | 16 | 7.3 | 118 | 12.7 | 6.8 | 6.742* |
| 26 | 3.6 | 3 | 1.4 | 29 | 3.1 | 2.2 | 3.012 |
| 116 | 16.1 | 38 | 17.4 | 154 | 16.6 | 1.3 | 0.145 |
| 93 | 13.3 | 29 | 13.2 | 122 | 13.1 | 0.1 | 0.0 |
| 3 | 0.4 | - | - | 3 | 0.3 | 0.4 | - |
| - | - | 8 | 3.7 | 8 | 0.9 | 3.7 | 17.60 * |
| 45 | 6.3 | 9 | 4.1 | 54 | 5.8 | 2.2 | 1.680 |
| 81 | 11.2 | 24 | 10.9 | 105 | 11.3 | 0.3 | 0.053 |
| 1 | 0.1 | 3 | 1.4 | 4 | 0.4 | 1.3 | - |
| 50 | 7.0 | 9 | 4.1 | 59 | 6.3 | 2.9 | 2.340 |
| 39 | 5.4 | 9 | 4.1 | 48 | 5.1 | 1.3 | 0.472 |
| 3 | 0.4 | 12 | 5.5 | 15 | 1.5 | 5.1 | 20.079* |
| 2 | 0.3 | - | - | 2 | 0.2 | 0.3 | - |
| 82 | 11.4 | 20 | 9.1 | 102 | 11.0 | 2.3 | 0.871 |
| 7 | 1.0 | 14 | 6.4 | 21 | 2.2 | 5.4 | 21.262* |
| - | - | - | - | - | - | - | - |
| 17 | 2.4 | 1 | 0.5 | 18 | 2.0 | 1.9 | 4.407* |
| 48 | 6.7 | 15 | 6.8 | 60 | 6.3 | 0.1 | - |
| 717 | 100.0 | 219 | 100.0 | 938 | 100.0 | | |

TABL

OPINIONS ON THE VALUE OF A C

| Item |
|---|
| 1. I would rather start earning money quickly, and learn on the job |
| 2. I (am) would be greatly dissatisfied to stop at my present level of knowledge |
| 3. College life and activities (like athletics) attract me very much |
| 4. College graduates get jobs with better pay |
| 5. The country needs more people who have highly developed skills and knowledge |
| 6. College is a good place to meet a worthy life-mate |
| 7. Skilled laborers get paid as much as most college graduates |
| 8. Going to college enables you to study more lines of work before deciding on a career |
| 9. A college education helps you live a happier, more complete life |
| 10. Going to college costs more than it is worth |
| 11. College studies will make you work at a high intellectual level, and I like that |
| 12. College graduates usually have the leadership positions |
| 13. Learning on a job is more practical than most school learning |
| 14. Persons who do not have college educations often make better leaders |
| 15. College life broadens you socially, and developes your personality |
| 16. Success in life depends upon ability and effort, not amount of education |
| 17. Going to college would be a waste of time for me |
| 18. Going to college has just been accepted; I have never thought of anything else |
| Invalid |
| Total |

TABLE 43

A COLLEGE EDUCATION (FEMALE)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | $Chi^2$ |
| | - | - | 49 | 7.6 | 49 | 3.6 | 7.6 | 55.391* |
| | 141 | 19.3 | 58 | 9.0 | 199 | 14.4 | 10.3 | 24.728* |
| | 27 | 3.7 | 15 | 2.3 | 42 | 3.0 | 1.4 | 2.386 |
| | 57 | 7.7 | 54 | 8.4 | 111 | 8.0 | 0.7 | 0.143 |
| | 85 | 11.5 | 99 | 15.5 | 184 | 13.3 | 4.0 | 3.689 |
| | 15 | 2.0 | 4 | 0.6 | 19 | 1.4 | 1.4 | 5.277* |
| | - | - | 8 | 1.2 | 8 | 0.6 | 1.2 | - |
| | 45 | 6.1 | 33 | 5.1 | 78 | 5.7 | 1.0 | 0.464 |
| | 115 | 15.6 | 51 | 7.9 | 166 | 12.0 | 7.7 | 17.630* |
| | 1 | 0.1 | 6 | 0.9 | 7 | 0.5 | 0.8 | - |
| hat | 43 | 5.8 | 29 | 4.5 | 72 | 5.2 | 1.3 | 1.392 |
| | 8 | 1.1 | 18 | 2.8 | 26 | 1.9 | 1.7 | 5.571* |
| | - | - | 23 | 3.6 | 23 | 1.7 | 3.6 | 25.090* |
| | - | - | 1 | 0.2 | 1 | 0.1 | 0.2 | - |
| | 122 | 16.5 | 77 | 12.1 | 199 | 14.4 | 4.4 | 5.167* |
| | 5 | 0.7 | 43 | 6.7 | 48 | 3.5 | 6.0 | 36.961* |
| | - | - | 22 | 3.4 | 22 | 1.6 | 3.4 | 26.40 * |
| se | 35 | 4.7 | 5 | 0.8 | 40 | 2.9 | 3.9 | 19.649* |
| | 36 | 5.2 | 48 | 7.4 | 84 | 6.2 | 2.2 | - |
| | 735 | 100.0 | 645 | 100.0 | 1380 | 100.0 | | |

## TABLE 44

## OPINIONS ON THE VALUE OF A COLLEGE

| Item |
|---|
| 1. It is better to learn a job, skill or trade than to go to college |
| 2. A college education is worth making the financial sacrifice it requires |
| 3. Success in life depends upon ability and effort, not amount of education |
| 4. Persons who do not have a college education are at a social disadvantage in life |
| 5. Going to college costs more than it is worth |
| 6. The school of "hard knocks" is more valuable than a college education |
| 7. A college education is required to get good jobs and to advance in them |
| 8. You do not need a college education to earn good money and be leaders in your communities |
| 9. People with a college education live more satisfying and interesting lives than those without a college education |
| 10. Too many young people are going to college |
| 11. Too many capable young people who desire to go to college are not able to go |
| 12. Going to college is not worth while for many young people who go |
| 13. People who learn on the job, use libraries, and teach themselves are as well-educated as those who go to colleges |
| No response |
| Total |

E 44

LLEGE EDUCATION (PARENTS OF MALES)

| | College | | Not College | | Total | | | |
|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | % Difference | Chi$^2$ |
| | 2 | 0.2 | 7 | 3.2 | 9 | 0.8 | 3.0 | - |
| | 210 | 24.4 | 36 | 16.4 | 246 | 22.6 | 8.0 | 11.005* |
| | 47 | 5.4 | 11 | 5.0 | 58 | 5.4 | 0.4 | 0.846 |
| ife | 73 | 8.4 | 12 | 5.5 | 85 | 7.8 | 2.9 | 4.184* |
| | 1 | 0.1 | 3 | 1.4 | 4 | 0.4 | 1.3 | - |
| | 3 | 0.3 | 2 | 0.9 | 5 | 0.5 | 0.6 | - |
| | 170 | 19.8 | 42 | 19.1 | 212 | 19.6 | 0.7 | 1.675 |
| | 38 | 4.4 | 12 | 5.5 | 50 | 4.7 | 1.1 | 0.0 |
| | 143 | 16.5 | 23 | 10.5 | 166 | 15.3 | 6.0 | 8.579* |
| | 3 | 0.3 | 1 | 0.5 | 4 | 0.4 | 0.2 | - |
| | 118 | 13.6 | 44 | 20.1 | 162 | 14.9 | 6.5 | 1.237 |
| | 39 | 4.5 | 12 | 5.5 | 51 | 4.7 | 1.0 | 0.0 |
| | 14 | 1.6 | 7 | 3.2 | 21 | 1.9 | 1.6 | 1.050 |
| | 4 | 0.5 | 7 | 3.2 | 11 | 1.0 | 2.7 | - |
| | 865 | 100.0 | 219 | 100.0 | 1084 | 100.0 | | |

TABLE 45

OPINIONS ON THE VALUE OF A COLLEG

| Item |
|---|
| 1. It is better to learn a job, skill or trade than to go to college |
| 2. A college education is worth making the financial sacrifice it requires |
| 3. Success in life depends upon ability and effort, not amount of education |
| 4. Persons who do not have a college education are at a social disadvantage in life |
| 5. Going to college costs more than it is worth |
| 6. The school of "hard knocks" is more valuable than a college education |
| 7. A college education is required to get good jobs and to advance in them |
| 8. You do not need a college education to earn good money and be leaders in your community |
| 9. People with a college education live more satisfying and interesting lives than those without a college education |
| 10. Too many young people are going to college |
| 11. Too many young people who desire to go to college are not able to go |
| 12. Going to college is not worth while for many young people |
| 13. People who learn on the job, use libraries, and teach themselves are as well-educated as those who go to colleges |
| No response |
| Total |

EDUCATION (PARENTS OF FEMALES)

| College |  | Not College |  | Total |  |  |  |
|---|---|---|---|---|---|---|---|
| N | % | N | % | N | % | % Difference | Chi$^2$ |
| 3 | 0.4 | 22 | 3.4 | 25 | 1.7 | 3.0 | 16.025* |
| 212 | 24.9 | 97 | 14.9 | 309 | 20.5 | 10.0 | 28.727* |
| 40 | 4.7 | 75 | 11.5 | 115 | 7.7 | 6.8 | 15.395* |
| 62 | 7.3 | 16 | 2.5 | 78 | 5.2 | 4.8 | 18.710* |
| 2 | 0.2 | 17 | 2.6 | 19 | 1.3 | 2.4 | 13.511* |
| 1 | 0.1 | 12 | 1.8 | 13 | 0.9 | 1.7 | 11.142* |
| 161 | 18.9 | 90 | 13.9 | 251 | 16.6 | 5.0 | 11.670* |
| 29 | 3.4 | 49 | 7.5 | 78 | 5.2 | 4.1 | 8.717* |
| 156 | 18.4 | 54 | 8.3 | 210 | 14.0 | 10.1 | 37.049* |
| 2 | 0.2 | 8 | 1.2 | 10 | 0.7 | 1.0 | - |
| 126 | 14.8 | 114 | 17.6 | 240 | 16.0 | 2.8 | 0.066 |
| 37 | 4.4 | 45 | 6.9 | 82 | 5.5 | 2.5 | 2.402 |
| 9 | 1.1 | 33 | 5.1 | 42 | 2.8 | 4.0 | 16.086* |
| 10 | 1.2 | 18 | 2.8 | 28 | 1.9 | 1.6 | - |
| 850 | 100.0 | 650 | 100.0 | 1500 | 100.0 |  |  |

# APPENDIX R

## TABLE 46

## DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED MALES OF HIGH SCHOOL CLASS RANK 75-99 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Military Service | | Other[c] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 75 | 64.1 | 68[d] | 90.6[e] | 1 | 1.3 | 2 | 2.7 | 2 | 2.7 | 2 | 2.7 | 100.0 |
| Non-degree school | 10 | 8.5 | 1 | 10.0 | 8 | 80.0 | 1 | 10.0 | - | - | - | - | 100.0 |
| Job[a] | 10 | 8.5 | - | - | - | - | 8 | 80.0 | - | - | 2 | 20.0 | 100.0 |
| Military service | 16 | 13.7 | 3 | 18.7 | - | - | 3 | 18.7 | 9 | 56.3 | 1 | 6.3 | 100.0 |
| No plans[b] | 6 | 5.2 | 2 | 33.3 | - | - | 4 | 66.7 | - | - | - | - | 100.0 |
| Total | 117 | 100.0 | 74 | 63.2 | 9 | 7.7 | 18 | 15.4 | 11 | 9.4 | 5 | 4.2 | 100.0 |

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[a] Includes working at home and apprentice
[b] Includes no response
[c] Includes unemployed
[d] Numbers summed in vertical columns
[e] Percentages summed in horizontal columns

## TABLE 47

DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED MALES OF HIGH SCHOOL CLASS RANK 50-74 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Military Service | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 176 | 57.0 | 164 | 93.2 | 2 | 1.1 | 8 | 4.5 | 1 | 0.6 | 1 | 0.6 | 100.0 |
| Non-degree school | 17 | 5.5 | 8 | 47.1 | 5 | 29.4 | 4 | 23.5 | - | - | - | - | 100.0 |
| Job | 48 | 15.5 | 9 | 18.8 | 3 | 6.3 | 29 | 60.3 | 5 | 10.4 | 2 | 4.2 | 100.0 |
| Military service | 54 | 17.5 | 1 | 1.9 | 2 | 3.7 | 11 | 20.4 | 38 | 70.3 | 2 | 3.7 | 100.0 |
| No plans | 14 | 4.5 | 3 | 21.5 | 1 | 7.1 | 8 | 57.2 | 1 | 7.1 | 1 | 7.1 | 100.0 |
| Total | 309 | 100.0 | 185 | 59.8 | 13 | 4.2 | 60 | 19.4 | 45 | 14.6 | 6 | 2.0 | 100.0 |

## TABLE 48

### DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED MALES OF HIGH SCHOOL CLASS RANK 25-49 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plans | | Degree School | | Non-degree School | | Job | | Military Service | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 121 | 37.9 | 98 | 81.0 | 6 | 4.9 | 11 | 9.1 | 3 | 2.5 | 3 | 2.5 | 100.0 |
| Non-degree school | 27 | 8.5 | 6 | 22.2 | 9 | 33.4 | 8 | 29.6 | 4 | 14.8 | - | - | 100.0 |
| Job | 62 | 19.4 | 2 | 3.2 | - | - | 43 | 69.3 | 12 | 19.4 | 5 | 8.1 | 100.0 |
| Military service | 87 | 27.3 | 5 | 5.7 | 3 | 3.4 | 19 | 21.8 | 58 | 66.8 | 2 | 2.3 | 100.0 |
| No plans | 22 | 6.9 | 3 | 13.6 | 2 | 9.1 | 9 | 40.9 | 5 | 22.8 | 3 | 13.6 | 100.0 |
| Total | 319 | 100.0 | 114 | 35.8 | 20 | 6.3 | 90 | 28.1 | 82 | 25.7 | 13 | 4.1 | 100.0 |

TABLE 49

DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED MALES OF HIGH SCHOOL CLASS RANK 1-24 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Military Service | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 50 | 18.2 | 37 | 74.0 | 4 | 8.0 | 6 | 12.0 | 2 | 4.0 | 1 | 2.0 | 100.0 |
| Non-degree school | 24 | 8.8 | 3 | 12.5 | 10 | 41.6 | 7 | 29.2 | 4 | 16.7 | - | - | 100.0 |
| Job | 96 | 35.0 | 2 | 2.1 | 2 | 2.1 | 71 | 73.9 | 15 | 15.6 | 6 | 6.3 | 100.0 |
| Military service | 88 | 32.1 | 4 | 4.5 | 3 | 3.4 | 14 | 15.9 | 64 | 72.8 | 3 | 3.4 | 100.0 |
| No plans | 16 | 5.9 | 4 | 25.0 | 2 | 12.5 | 6 | 37.4 | 3 | 18.8 | 1 | 6.3 | 100.0 |
| Total | 274 | 100.0 | 50 | 18.2 | 21 | 7.7 | 104 | 37.9 | 88 | 32.1 | 11 | 4.1 | 100.0 |

## TABLE 50

## DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED MALES OF HENMON-NELSON TEST OF MENTAL ABILITY 75-99 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Military Service | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 103 | 49.0 | 92 | 89.4 | 3 | 2.9 | 7 | 6.8 | 1 | 0.9 | - | - | 100.0 |
| Non-degree school | 8 | 3.8 | 3 | 37.5 | 2 | 25.0 | 3 | 37.5 | - | - | - | - | 100.0 |
| Job | 36 | 17.2 | 5 | 13.9 | 1 | 2.8 | 22 | 61.1 | 5 | 13.9 | 3 | 8.3 | 100.0 |
| Military service | 55 | 26.2 | 3 | 5.5 | 1 | 1.8 | 13 | 23.6 | 36 | 65.5 | 2 | 3.6 | 100.0 |
| No plans | 8 | 3.8 | 2 | 25.0 | - | - | 5 | 62.5 | - | - | 1 | 12.5 | 100.0 |
| Total | 210 | 100.0 | 105 | 50.0 | 7 | 3.3 | 50 | 23.8 | 42 | 20.0 | 6 | 2.9 | 100.0 |

## TABLE 51

### DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED MALES OF HENMON-NELSON TEST OF MENTAL ABILITY 50-74 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Military Service | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 153 | 51.1 | 134 | 87.6 | 3 | 1.9 | 7 | 4.6 | 5 | 3.3 | 4 | 2.6 | 100.0 |
| Non-degree school | 22 | 7.3 | 4 | 18.2 | 8 | 36.4 | 5 | 22.7 | 5 | 22.7 | - | - | 100.0 |
| Job | 37 | 12.3 | 5 | 13.5 | 2 | 5.4 | 23 | 62.2 | 5 | 13.5 | 2 | 5.4 | 100.0 |
| Military service | 64 | 21.3 | 4 | 6.3 | 3 | 4.7 | 12 | 18.8 | 43 | 67.1 | 2 | 3.1 | 100.0 |
| No plans | 24 | 8.0 | 7 | 29.2 | - | - | 11 | 45.8 | 5 | 20.8 | 1 | 4.2 | 100.0 |
| Total | 300 | 100.0 | 154 | 51.3 | 16 | 5.3 | 58 | 19.3 | 63 | 21.0 | 9 | 3.1 | 100.0 |

## TABLE 52

### DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED MALES OF HENMON-NELSON TEST OF MENTAL ABILITY 25-49 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Military Service | | Other | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | % |
| Degree school | 75 | 34.1 | 70 | 93.4 | 1 | 1.3 | 4 | 5.3 | - | - | - | - | 100.0 |
| Non-degree school | 22 | 10.0 | 5 | 22.7 | 11 | 50.0 | 5 | 22.7 | 1 | 4.6 | - | - | 100.0 |
| Job | 55 | 25.0 | 2 | 3.6 | 1 | 1.8 | 44 | 80.0 | 4 | 7.3 | 4 | 7.3 | 100.0 |
| Military service | 59 | 26.8 | 3 | 5.1 | 3 | 5.1 | 7 | 11.9 | 43 | 72.8 | 3 | 5.1 | 100.0 |
| No plans | 9 | 4.1 | 2 | 22.2 | 1 | 11.1 | 5 | 55.6 | - | - | 1 | 11.1 | 100.0 |
| Total | 220 | 100.0 | 82 | 37.3 | 17 | 7.7 | 65 | 29.5 | 48 | 21.8 | 8 | 2.7 | 100.0 |

## TABLE 53

## DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED MALES OF HENMON-NELSON TEST OF MENTAL ABILITY 1-24 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Military Service | | Other | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | % |
| Degree school | 29 | 19.0 | 26 | 89.8 | 1 | 3.4 | 1 | 3.4 | 1 | 3.4 | - | - | 100.0 |
| Non-degree school | 10 | 6.5 | 1 | 10.0 | 5 | 50.0 | 3 | 30.0 | 1 | 10.0 | - | - | 100.0 |
| Job | 62 | 40.6 | 1 | 1.6 | 1 | 1.6 | 44 | 71.0 | 13 | 21.0 | 3 | 4.8 | 100.0 |
| Military service | 40 | 26.1 | 2 | 5.0 | 3 | 7.5 | 7 | 17.5 | 28 | 70.0 | - | - | 100.0 |
| No plans | 12 | 7.8 | 1 | 8.3 | 2 | 16.7 | 6 | 50.0 | 2 | 16.7 | 1 | 8.3 | 100.0 |
| Total | 153 | 100.0 | 31 | 20.3 | 12 | 7.8 | 61 | 39.9 | 45 | 29.4 | 4 | 2.6 | 100.0 |

## TABLE 54

### DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED FEMALES OF HIGH SCHOOL CLASS RANK 75-99 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Marriage | | Other[c] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 105 | 36.4 | 94[d] | 89.6[e] | 8 | 7.6 | 3 | 2.8 | - | - | - | - | 100.0 |
| Non-degree school | 69 | 24.0 | 4 | 5.8 | 53 | 76.9 | 11 | 15.9 | - | - | 1 | 1.4 | 100.0 |
| Job[a] | 105 | 36.4 | 6 | 5.7 | 2 | 1.9 | 90 | 85.7 | 5 | 4.8 | 2 | 1.9 | 100.0 |
| Marriage | 3 | 1.1 | - | - | - | - | - | - | 3 | 100.0 | - | - | 100.0 |
| No plans[b] | 6 | 2.1 | 1 | 16.7 | 1 | 16.7 | 2 | 33.3 | - | - | 2 | 33.3 | 100.0 |
| Total | 288 | 100.0 | 105 | 36.4 | 64 | 22.2 | 106 | 36.9 | 8 | 2.8 | 5 | 1.7 | 100.0 |

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[a] Includes working at home

[b] Includes no response and military service

[c] Includes unemployed and military service

[d] Numbers summed in vertical columns

[e] Percentiles summed in horizontal columns

## TABLE 55

### DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED FEMALES OF HIGH SCHOOL CLASS RANK 50-74 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Marriage | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 133 | 36.8 | 121 | 91.0 | 6 | 4.5 | 6 | 4.5 | - | - | - | - | 100.0 |
| Non-degree school | 87 | 24.1 | 5 | 5.7 | 73 | 84.0 | 8 | 9.2 | - | - | 1 | 1.1 | 100.0 |
| Job | 128 | 35.5 | 3 | 2.3 | 7 | 5.5 | 100 | 78.1 | 13 | 10.2 | 5 | 3.9 | 100.0 |
| Marriage | 5 | 1.4 | - | - | - | - | - | - | 5 | 100.0 | - | - | 100.0 |
| No plans | 8 | 2.2 | 1 | 12.5 | - | - | 4 | 50.0 | - | - | 3 | 37.5 | 100.0 |
| Total | 361 | 100.0 | 130 | 36.0 | 86 | 23.8 | 118 | 32.7 | 18 | 5.0 | 9 | 2.5 | 100.0 |

## TABLE 56

## DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED FEMALES OF HIGH SCHOOL CLASS RANK 25-49 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Marriage | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 59 | 27.2 | 45 | 76.2 | 6 | 10.2 | 8 | 13.6 | - | - | - | - | 100.0 |
| Non-degree school | 63 | 29.0 | 1 | 1.6 | 46 | 73.0 | 13 | 20.6 | 2 | 3.2 | 1 | 1.6 | 100.0 |
| Job | 81 | 37.3 | 5 | 6.2 | 4 | 4.9 | 60 | 74.1 | 8 | 9.9 | 4 | 4.9 | 100.0 |
| Marriage | 3 | 1.4 | - | - | - | - | 1 | 33.3 | 2 | 66.7 | - | - | 100.0 |
| No plans | 11 | 5.1 | - | - | 3 | 27.3 | 4 | 36.3 | 1 | 9.1 | 3 | 27.3 | 100.0 |
| Total | 217 | 100.0 | 51 | 23.5 | 59 | 27.2 | 86 | 39.6 | 13 | 6.0 | 8 | 3.7 | 100.0 |

## TABLE 57

### DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED FEMALES OF HIGH SCHOOL CLASS RANK 1-24 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plans | | Degree School | | Non-degree School | | Job | | Marriage | | Other | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | % |
| Degree school | 12 | 9.8 | 10 | 83.3 | - | - | 2 | 16.7 | - | - | - | - | 100.0 |
| Non-degree school | 18 | 14.6 | - | - | 8 | 44.4 | 7 | 38.9 | 1 | 5.6 | 2 | 11.1 | 100.0 |
| Job | 81 | 65.9 | 1 | 1.2 | 8 | 9.9 | 57 | 70.4 | 6 | 7.4 | 9 | 11.1 | 100.0 |
| Marriage | 3 | 2.4 | - | - | - | - | - | - | 3 | 100.0 | - | - | 100.0 |
| No plans | 9 | 7.3 | 2 | 22.2 | 1 | 11.1 | 4 | 44.5 | - | - | 2 | 22.2 | 100.0 |
| Total | 123 | 100.0 | 13 | 10.6 | 17 | 13.8 | 70 | 56.9 | 10 | 8.1 | 13 | 10.6 | 100.0 |

### TABLE 58

### DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED FEMALES OF HENMON-NELSON TEST OF MENTAL ABILITY 75-99 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Marriage | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 41 | 35.0 | 36 | 87.8 | 2 | 4.9 | 3 | 7.3 | - | - | - | - | 100.0 |
| Non-degree school | 28 | 23.9 | 2 | 7.1 | 23 | 82.2 | 3 | 10.7 | - | - | - | - | 100.0 |
| Job | 45 | 38.5 | 1 | 2.2 | - | - | 38 | 84.4 | 4 | 8.8 | 2 | 4.4 | 100.0 |
| Marriage | - | - | - | - | - | - | - | - | - | - | - | - | - |
| No plans | 3 | 2.6 | - | - | - | - | 2 | 66.7 | - | - | 1 | 33.3 | 100.0 |
| Total | 117 | 100.0 | 39 | 33.3 | 25 | 21.4 | 46 | 39.3 | 4 | 3.4 | 3 | 2.6 | 100.0 |

## TABLE 59

### DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED FEMALES OF HENMON-NELSON TEST OF MENTAL ABILITY 50-74 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Marriage | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 130 | 38.9 | 118 | 90.1 | 8 | 6.2 | 4 | 3.1 | - | - | - | - | 100.0 |
| Non-degree school | 85 | 25.4 | 5 | 5.9 | 64 | 75.2 | 13 | 15.3 | 2 | 2.4 | 1 | 1.2 | 100.0 |
| Job | 109 | 32.7 | 7 | 6.4 | 5 | 4.6 | 84 | 77.0 | 9 | 8.3 | 4 | 3.7 | 100.0 |
| Marriage | 5 | 1.5 | - | - | - | - | - | - | 5 | 100.0 | - | - | 100.0 |
| No plans | 5 | 1.5 | 2 | 40.0 | 1 | 20.0 | - | - | - | - | 2 | 40.0 | 100.0 |
| Total | 334 | 100.0 | 132 | 39.5 | 78 | 23.4 | 101 | 30.2 | 16 | 4.8 | 7 | 2.1 | 100.0 |

## TABLE 60

### DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED FEMALES OF HENMON-NELSON TEST OF MENTAL ABILITY 25-49 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plan | | Degree School | | Non-degree School | | Job | | Marriage | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 73 | 26.2 | 63 | 86.4 | 5 | 6.8 | 5 | 6.8 | - | - | - | - | 100.0 |
| Non-degree school | 65 | 23.3 | 4 | 6.2 | 47 | 72.3 | 11 | 16.9 | - | - | 3 | 4.6 | 100.0 |
| Job | 126 | 45.1 | 6 | 4.8 | 3 | 2.4 | 106 | 84.0 | 7 | 5.6 | 4 | 3.2 | 100.0 |
| Marriage | 5 | 1.8 | - | - | - | - | 1 | 20.0 | 4 | 80.0 | - | - | 100.0 |
| No plans | 10 | 3.6 | 1 | 10.0 | 1 | 10.0 | 7 | 70.0 | 1 | 10.0 | - | - | 100.0 |
| Total | 279 | 100.0 | 74 | 26.5 | 56 | 20.1 | 130 | 46.6 | 12 | 4.3 | 7 | 2.5 | 100.0 |

## TABLE 61

### DISTRIBUTION OF NON-SCHOLASTICALLY TALENTED FEMALES OF HENMON-NELSON TEST OF MENTAL ABILITY 1-24 PERCENTILES ACCORDING TO ORIGINAL PLAN AND WHAT THEY DID IN FALL OF 1957

| | Original Plans | | Degree School | | Non-degree School | | Job | | Marriage | | Other | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | % | N | % | N | % | N | % | N | % | N | % | Total % |
| Degree school | 20 | 13.0 | 17 | 85.0 | - | - | 3 | 15.0 | - | - | - | - | 100.0 |
| Non-degree school | 37 | 24.0 | 1 | 2.7 | 25 | 67.6 | 9 | 24.3 | 1 | 2.7 | 1 | 2.7 | 100.0 |
| Job | 89 | 57.9 | 1 | 1.1 | 8 | 9.0 | 63 | 70.8 | 10 | 11.2 | 7 | 7.9 | 100.0 |
| Marriage | 3 | 1.9 | - | - | - | - | - | - | 3 | 100.0 | - | - | 100.0 |
| No plans | 5 | 3.2 | - | - | - | - | 2 | 40.0 | - | - | 3 | 60.0 | 100.0 |
| Total | 154 | 100.0 | 19 | 12.3 | 33 | 21.5 | 77 | 50.0 | 14 | 9.1 | 11 | 7.1 | 100.0 |

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